SONY®

Multi Channel AV Receiver

Operating Instructions

STR-DN2010

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.
Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

Excessive sound pressure from earphones and headphones can cause hearing loss.

This symbol is intended to alert the user to the presence of the Hot Surface that may be hot if it is touched during the normal operation.

This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection cable shorter than 10 feet (3 meters).

For customers in the United States

Owner's Record

The model and serial numbers are located on the rear of the unit. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The following FCC statement applies only to the version of this model manufactured for sale in the U.S.A. Other versions may not comply with FCC technical regulations.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

To reduce the risk of electric shock, the speaker cord should be connected to the apparatus and the speakers in accordance with the following instructions.
1) Disconnect the AC power cord from the MAINS.
2) Strip 10 to 15 mm of the wire insulation of the speaker cord.
3) Connect the speaker cord to the apparatus and the speakers carefully so as not to touch the core of speaker cord by hand. Also disconnect the AC power cord from the MAINS before disconnecting the speaker cord from the apparatus and the speakers.

For customers in Europe

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste.
On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead.
By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.
In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only.
To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.
For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.
For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for customers: The following information is only applicable to equipment sold in countries applying EU Directives.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

About This Manual

- The instructions in this manual are for model STR-DN2010. Check your model number by looking at the lower right corner of the front panel. In this manual, the USA model is used for illustration purposes unless stated otherwise. Any difference in operation is clearly indicated in the text, for example, "European model only".
- The instructions in this manual describe the controls on the supplied remote. You can also use the controls on the receiver if they have the same or similar names as those on the remote.

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(ii) DECODE VC-1 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE VC-1 VIDEO.

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"BRAVIA" Sync Features

S-AIR Operations

Other Operations

Adjusting Settings

Using the Remote

Additional Information

Supplied accessories

- Operating Instructions (this manual)
- Quick Setup Guide
- GUI Menu List
- Software License Information (1)
- Setup Manager CD-ROM (1)
- VAIO Media plus CD-ROM (1)
- FM wire antenna (aerial) (1)

- AM loop antenna (aerial) (1)

- Remote commander (1)
  - RM-AAP055 (USA model only)
  - RM-AAP056 (European model only)
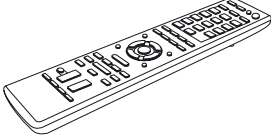
- R6 (size-AA) batteries (2)

- Optimizer microphone (ECM-AC2) (1)

Inserting batteries into the remote

Insert two R6 (size-AA) batteries in the RM-AAP055 (USA model only) or RM-AAP056 (European model only) Remote Commander.
Observe the correct polarity when installing batteries.
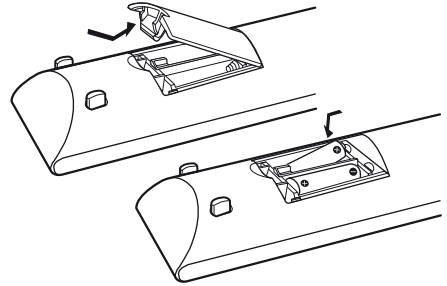
Notes
- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with old ones.
- Do not mix manganese batteries and other kinds of batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not intend to use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.
- When you replace the batteries, the programmed remote codes may be cleared. If this happens, program the remote codes again (page 130).
- When the remote no longer operates the receiver, replace all the batteries with new ones.

Description and location of parts

Front panel
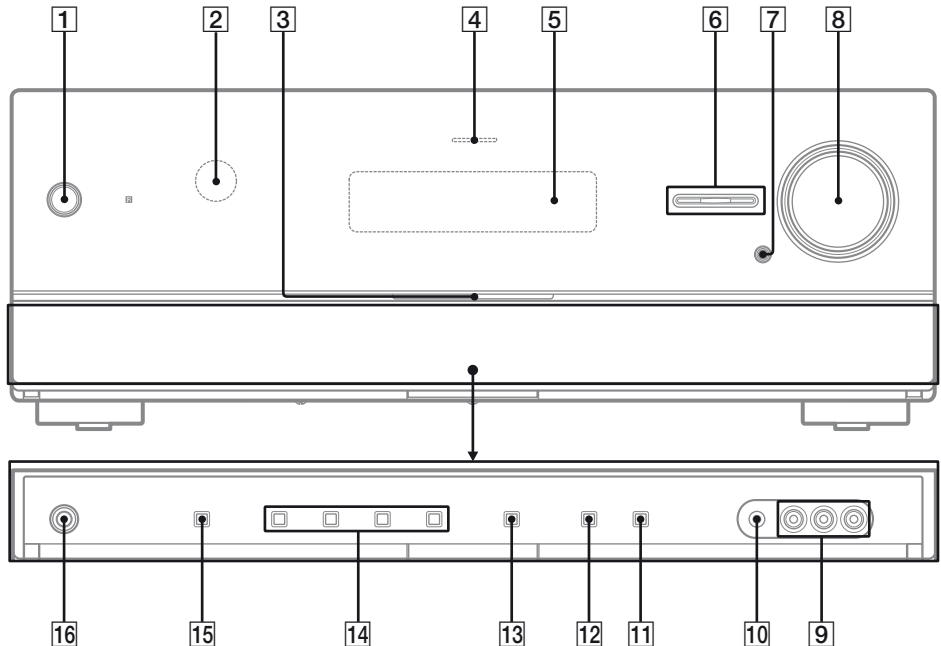
1 **I/⏻ (on/standby)**
Turns the receiver on or off (page 39, 63, 77).

2 **Remote sensor**
Receives signals from remote commander.

3 **White indicator**
Lights up when the receiver is turned on.

4 **MULTI CHANNEL DECODING indicator**
Lights up when multi channel audio signals are decoded (page 139).

5 **Display**
Displays the current status of the selected component or a list of selectable items (page 10).

6 **INPUT SELECTOR +/–**
Selects the input source to play back (page 55, 60, 103).

7 **MUTING (page 55)**

8 **MASTER VOLUME**
Adjusts the volume level of all speakers at the same time (page 55).

9 **VIDEO 2 IN jacks (page 32)**

10 **AUTO CAL MIC jack (page 43)**

11 **DISPLAY**
Selects the information displayed on the display (page 127).

12 **DIMMER**
Adjusts the brightness of the display.

13 **INPUT MODE**
Selects the input mode when the same components are connected to both digital and analog jacks (page 103).

14 **2CH/A.DIRECT, A.F.D., MOVIE, MUSIC (page 73, 75)**

15 **SPEAKERS (page 42)**

16 **PHONES jack**
Connects to headphones (page 137).

Indicators on the display
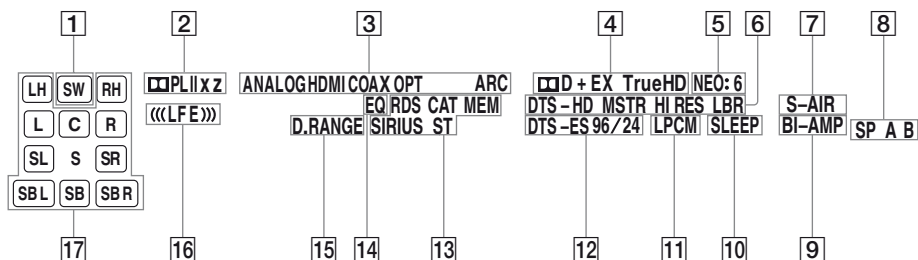
Indicator and explanation

1 SW

Lights up when the audio signal is output from the SUBWOOFER jack.

2 Dolby Pro Logic indicators

Lights up one of the respective indicators when the receiver performs Dolby Pro Logic processing. This matrix surround decoding technology can enhance input signals.

🔲 PL	Dolby Pro Logic
🔲 PL II	Dolby Pro Logic II
🔲 PL IIx	Dolby Pro Logic IIx
🔲 PL IIz	Dolby Pro Logic IIz

Note

These indicators may not light up depending on the speaker pattern setting.

3 Input indicators

Light up to indicate the current input.

ANALOG

Lights up when
– no digital signal is being input.
– INPUT MODE is set to "ANALOG".
– the "A. DIRECT" is being selected.

HDMI

The receiver recognizes a component connected via an HDMI IN jack.

COAX

Lights up when digital signal is input through the COAXIAL jack (page 103).

OPT

Lights up when digital signal is input through the OPTICAL jack (page 103).

ARC

Lights up when TV input is selected and the Audio Return Channel (ARC) signals are detected.

Indicator and explanation

4 Dolby Digital Surround indicators

Lights up one of the respective indicators when the receiver is decoding the corresponding Dolby Digital format signals.

🔲 D	Dolby Digital
🔲 D EX	Dolby Digital Surround EX
🔲 D+	Dolby Digital Plus
🔲 TrueHD	Dolby TrueHD

Note

When playing a Dolby Digital format disc, be sure that you have made digital connections and that INPUT MODE is not set to "ANALOG" (page 103).

5 NEO:6

Lights up when DTS Neo:6 Cinema/Music decoder is activated (page 74).

6 DTS-HD indicators

Lights up one of the respective indicators when the receiver is decoding the corresponding DTS-HD format signals.

DTS-HD MSTR	DTS-HD Master Audio
DTS-HD HI RES	DTS-HD High Resolution Audio
DTS-HD LBR	DTS-HD Low Bit Rate Audio

7 S-AIR

Lights up when the S-AIR transmitter (not supplied) is inserted.

8 SP A/SP B/SP A B

Lights up according to the front speaker system used (page 42).
However, these indicators do not light up if the speaker output is turned off or if headphones are connected.

9 BI-AMP

Lights up when surround back speakers selection is set to "BI-AMP" (page 106).

Indicator and explanation

10 SLEEP

Lights up when the Sleep Timer is activated.

11 LPCM

Lights up when the receiver is decoding the Linear PCM signals.

12 DTS(-ES) indicators

Lights up one of the respective indicators when the receiver is decoding the corresponding DTS format signals.

DTS	DTS
DTS-ES	DTS-ES
DTS 96/24	DTS 96 kHz/24 bit

Note

When playing a DTS format disc, be sure that you have made digital connections and that INPUT MODE is not set to "ANALOG" (page 103).

13 Tuning indicators

Lights up when the receiver tunes in radio stations, or satellite radio stations.

RDS (European model only)
A station that provides RDS services is tuned in.
CAT (USA model only)
The category mode is selected during the satellite radio operation.
MEM
A memory function, such as Preset Memory (page 63), etc., is activated.
SIRIUS (USA model only)
The SiriusConnect Home tuner is connected and "SIRIUS" is selected.
ST
Stereo broadcast

14 EQ

Lights up when the equalizer is activated.

15 D.RANGE

Lights up when dynamic range compression is activated (page 113).

16 《《LFE》》

Lights up when the disc being played back contains an LFE (Low Frequency Effect) channel and the LFE channel signal is actually being reproduced.

Indicator and explanation

17 Playback channel indicators

The letters (L, C, R, etc.) indicate the channels being played back. The boxes around the letters vary to show how the receiver downmixes the source sound (based on the speaker settings).

LH	Front Left High
RH	Front Right High
L	Front Left
R	Front Right
C	Center (monaural)
SL	Surround Left
SR	Surround Right
S	Surround (monaural or the surround components obtained by Pro Logic processing)
SBL	Surround Back Left
SBR	Surround Back Right
SB	Surround Back (the surround back components obtained by 6.1 channel decoding)

Example:
Speaker pattern: 3/0.1
Recording format: 3/2.1
Sound Field: A.F.D. AUTO
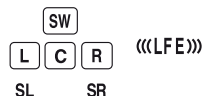
Rear panel
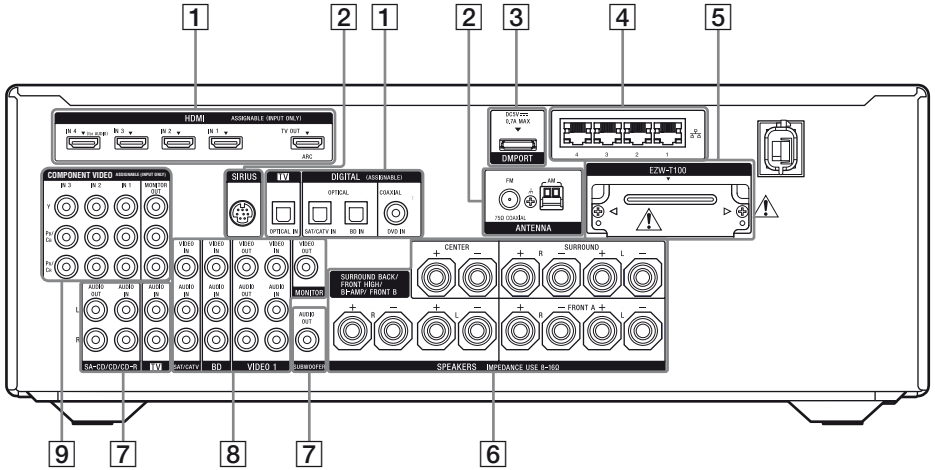
1 DIGITAL INPUT/OUTPUT section

OPTICAL IN jacks (page 23, 29, 30, 31)

COAXIAL IN jack (page 29, 30, 31)

HDMI IN/OUT* jacks (page 23, 26)

2 ANTENNA section

FM ANTENNA jack (page 35)

AM ANTENNA terminals (page 35)

SIRIUS jack (USA model only) (page 66)

3 DMPORT section

DMPORT jack (page 34)

4 NETWORK section

LAN ports (switching hubs) (page 38)

5 S-AIR section (page 36)

EZW-T100 slot (with cover)

⚠ CAUTION
Please do not remove the slot cover until you want to install the wireless transmitter.

6 SPEAKERS section (page 21)

7 AUDIO INPUT/OUTPUT section

White (L)
Red (R) — AUDIO IN/OUT jacks (page 23, 34)

Black — AUDIO OUT jack (page 21)

[8] **VIDEO/AUDIO INPUT/OUTPUT section (page 29, 31, 32)**

⊚ White (L)

AUDIO IN/OUT jacks

⊚ Red (R)

⊚ Yellow   VIDEO IN/OUT* jacks

[9] **COMPONENT VIDEO INPUT/ OUTPUT section (page 23, 29, 30, 31)**

⊚ Green (Y)

⊚ Blue (P_B/C_B)   Y, P_B/C_B, P_R/C_R IN/OUT* jacks

⊚ Red (P_R/C_R)

* You can watch the selected input image when you connect the MONITOR OUT or HDMI TV OUT jack to a TV (page 23).

Remote commander

You can use the supplied remote to operate the receiver and to control the Sony audio/video components that the remote is assigned to operate.
You can also program the remote to control non-Sony audio/video components. For details, see "Programming the remote" (page 130).

- **RM-AAP055 (USA model only)**
- **RM-AAP056 (European model only)**
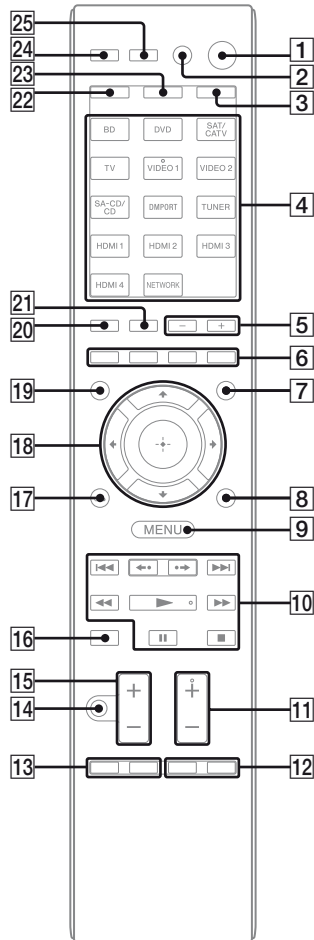
Name and function

1 I/⏻ (on/standby)
Turns the receiver on or sets it to the standby mode.

Saving the power in standby mode
When "Control for HDMI" (page 90), "Network Standby" (page 120) and "S-AIR Standby" (page 102) are set to "OFF".

2 AV I/⏻a) (on/standby)
Turns on or off the audio/video components that the remote is programmed to operate.
To turn the TV on or off, press TV (23) and then press AV I/⏻.
If you press I/⏻ (1) at the same time, it will turn off the receiver and other components (SYSTEM STANDBY).

Note
The function of the AV I/⏻ changes automatically each time you press the input buttons (4).

3 AMP
The button lights up and activates the receiver operation (page 122).

4 Input buttons (VIDEO 1b))
Selects the component you want to use. When you press any of the input buttons, the receiver turns on. The buttons are initial assigned to control Sony components. You can program the remote to control non-Sony components following the steps in "Programming the remote" on page 130.

Numeric buttonsa) (number 5b))
Press SHIFT (22), then press numeric buttons to
– preset/tune to preset stations.
– select track numbers. Press 0/10 to select track number 10.
– select channel numbers.
Press TV (23), then press the numeric buttons to select the TV channels.

-/--a)
Press SHIFT (22), then press -/-- to select the channel entry mode, either one or two digit.
Press TV (23), then press -/-- to select the TV channel entry mode.

>10a)
Press SHIFT (22), then press >10 to select track numbers over 10.

Name and function

ENTERa)
Press SHIFT (22), then press ENTER to enter the value after selecting a channel, disc or track using the numeric buttons.
Press TV (23), then press ENTER to enter the value of Sony TV.

MEMORY
Press SHIFT (22), then press MEMORY to store a station during tuner operation.

▤a) (Text) (RM-AAP056 only)
Press TV (23), then press ▤ to display text information.

5 SOUND FIELD +/–
Selects a sound field (page 73).

6 Color buttonsa)
Displays an operation guide on the TV screen when the color buttons are available. Follow the operation guide to perform a selected operation.

7 GUI MODE
Displays the GUI menu on the TV screen.

8 TOOLS/OPTIONSa)
Displays and selects items from the option menus.
Press TV (23), then press TOOLS/OPTIONS to display the options of Sony TV.

9 MENU, HOMEa)
Displays the menu to operate the audio/video components.
Press TV (23), then press HOME to display the menus of Sony TV.

10 ⏮/⏭a), ⏪/⏩a), ▶a)b), ⏸a), ■a)
Skip, backward/forward, play, pause, stop operation.

↩./.↪a)
Replay the previous scene or fast forward the current scene.

CATEGORY +/– (RM-AAP055 only)
Selects a category for satellite tuner (page 129).

CATEGORY MODEb) (RM-AAP055 only)
Selects the category mode for satellite tuner (page 129).

TUNING +/–a)
Scans a station.

D.TUNING
Enters direct tuning mode (page 128).

Name and function

⑪ **TV CH +/–[a)b) (RM-AAP055 only)**
PROG +/–[a)b) (RM-AAP056 only)
Press TV (23), then press TV CH +/– or
PROG +/– to select preset TV channels.

PRESET +/–[a)b)
Selects preset stations or channels.

🔺[b)/🔻 (RM-AAP056 only)
In text mode: Press TV (23), then press 🔺/🔻
to select the next or previous page.

⑫ **F1/F2[a)**
Press BD or DVD (4), then press F1 or F2 to
select a component.
• DVD/HDD COMBO
  F1: HDD
  F2: DVD disc, Blu-ray Disc
• DVD/VCR COMBO
  F1: DVD disc, Blu-ray Disc
  F2: VCR

SLEEP
Activates the Sleep Timer function and the
duration which the receiver turns off
automatically (page 59).

⑬ **BD/DVD TOP MENU[a), MENU[a)**
Displays the menu or on-screen guide on the TV
screen. Then, use 🔺/🔻/◄/► (18) and ⊕ (18) to
perform menu operations.

TV INPUT[a) (RM-AAP055 only)
⊸[a) (Input select) (RM-AAP056 only)
Press TV (23), then press TV INPUT or ⊸ to
select the input signal (TV input or video input).

⊜[a) (Text hold) (RM-AAP056 only)
In text mode: Press TV (23), then press ⊜ to
hold the current page.

WIDE[a) (RM-AAP055 only)
⊞[a) (Wide mode) (RM-AAP056 only)
Press TV (23), then press WIDE or ⊞
repeatedly to select the wide picture mode.

⑭ **MUTING[a) (RM-AAP055 only)**
🔇[a) (RM-AAP056 only)
Turns off the sound temporarily. Press the
button again to restore the sound.
Press TV (23), then press MUTING or 🔇 to
activate the TV's muting function.

⑮ **TV VOL +/–[a) (RM-AAP055 only)**
◿ +/–[a) (RM-AAP056 only)
Press TV (23), then press TV VOL +/– or
◿ +/– to adjust the TV volume level.

MASTER VOL +/–[a) (RM-AAP055 only)
◿ +/–[a) (RM-AAP056 only)
Adjusts the volume level of all speakers at the
same time.

Name and function

⑯ **DISC SKIP[a)**
Skips disc when using a multi-disc changer.

⑰ **RETURN/EXIT ⤺[a)**
Returns to the previous menu or exits the menu
while the menu or on-screen guide is displayed
on the TV screen.
Press TV (23), then press RETURN/EXIT ⤺
to return to the previous menu of Sony TV.

⑱ **⊕[a), 🔺/🔻/◄/►[a)**
Press 🔺/🔻/◄/► to select the menu items, then
press ⊕ to enter the selection.

⑲ **GUIDE[a) (RM-AAP055 only)**
⊞[a) (Guide) (RM-AAP056 only)
Press TV (23), then press GUIDE or ⊞ to
display the on-screen program guide.

⑳ **DISPLAY[a)**
Views information on the display.
(RM-AAP055 only) Press TV (23), then press
DISPLAY to display information of TV.

**ⓘ+, ? (Info, Text reveal) (RM-AAP056
only)**
Press TV (23), then press ⓘ+ to display
information such as current channel number and
screen mode.
In text mode: Press TV (23), then press ? to
reveal hidden information (e.g. answers to a
quiz).

㉑ **NIGHT MODE**
Activates the Night Mode function (page 77).

㉒ **SHIFT**
The button lights up and activates the buttons
with pink printing.

㉓ **TV**
The button light up and activates the buttons
with yellow printing.

㉔ **THEATER (RM-AAP055 only)**
THEATRE (RM-AAP056 only)
Sets the optimal picture settings automatically
for watching movies when you connect a Sony
TV that is compatible with the THEATER or
THEATRE button function (page 93).

㉕ **RM SET UP**
Set up the remote.

a)See the table on page 17 for information on the
buttons that you can use to control each
component.

b)The following buttons have tactile dots. Use the
tactile dots as reference when operating the
receiver.
– RM-AAP055 only: number 5, VIDEO 1, ▶,
  CATEGORY MODE, TV CH +, PRESET +
– RM-AAP056 only: number 5, VIDEO 1, ▶,
  PROG +, PRESET +, ⊟▲

Notes

• Some functions explained in this section may not
  work depending on the model.
• The above explanation is intended to serve as an
  example only. Therefore, depending on the
  component, the above operation may not be
  possible or may operate differently than described.

To control other Sony components

Name	TV	VCR	DVD player, DVD/VCR combo	Blu-ray Disc player	HDD Recorder	PSX	Video CD player, LD player	Digital CATV terminal[a]	DSS[a]	Digital satellite/terrestrial receiver[b]	Tape deck A/B	DAT deck	CD player, MD deck	DIGITAL MEDIA PORT device
[2] AV I/⏻	●	●	●	●	●	●	●	●	●	●		●	●	
[4] Numeric buttons	●	●	●	●	●	●	●	●	●	●	●	●	●	●
-/--, >10	●	●	●	●	●	●	●	●	●			●	●	
ENTER	●	●	●	●	●	●	●[d]	●	●			●	●	
▤[b] (Text)	●									●				
[6] Color buttons	●		●[c]	●	●					●				
[8] TOOLS/OPTIONS	●			●	●	●		●	●					
[9] MENU, HOME	●	●	●	●	●	●				●				●
[10] I◀◀/▶▶I	●	●	●	●	●	●	●	●			●[e]	●	●	●
←·/·→	●		●	●	●	●		●						●
◀◀/TUNING –, ▶▶/TUNING +	●	●	●	●	●	●	●	●			●	●	●	●[g]
▶, II, ■	●	●	●	●	●	●	●				●	●	●	●
[11] PRESET +/–, TV CH +/–[a], PROG +/–[b]	●	●	●	●	●		●[d]	●	●	●				
[12] F1/F2			●	●										
[13] BD/DVD TOP MENU, BD/DVD MENU			●	●		●								
TV INPUT[a], ⇥[b] (Input select), �ⓑ[b] (Text hold), WIDE[a], ⊞[b] (Wide mode)	●													
[14] MUTING[a], 🔇[b]	●													
[15] MASTER VOL +/–[a], TV VOL +/–[a], ◺ +/–[b]	●													
[16] DISC SKIP			●	●			●[f]						●	
[17] RETURN/EXIT ⮐	●		●	●	●	●	●	●	●	●				●
[18] ▲/▼/◀/▶, (+)	●	●	●	●	●	●		●	●	●				●
[19] GUIDE[a], ▤[b] (Guide)	●		●[c]	●	●	●		●		●				
[20] DISPLAY	●	●	●	●	●	●	●	●	●				●	

[a] RM-AAP055 only.
[b] RM-AAP056 only.
[c] DVD player only.
[d] LD player only.
[e] Deck B only.
[f] Video CD player only.
[g] ◀◀/▶▶ only.

Getting started

You can enjoy your audio/video components connected to the receiver by following the simple steps below.

Installing and connecting the speakers

See "1: Installing the speakers" (page 19) and "2: Connecting the speakers" (page 21).

⬇

Checking the connection appropriate for your components

Connecting the TV and video components

The image quality depends on the connecting jack. See the illustration on the right. Select the connection according to the jacks on your components.

Q: Does your TV have an HDMI jack?
→ **No:** See the connection for a TV without an HDMI jack (page 23).
→ **Yes:** See the connection for the TV with HDMI jack (page 23).

> **Q: Does your video component have an HDMI jack?**
> → **No:** See "Connecting components without HDMI jacks" (page 28).
> → **Yes:** See "Connecting components with HDMI jacks" (page 25).

	COMPONENT VIDEO	
HDMI	Y / P_B/C_B / P_R/C_R	VIDEO
Digital	**Analog**	

High quality image

⬇
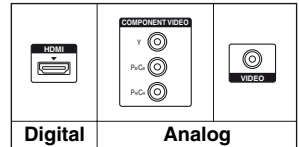
Connecting the audio components

See "4b: Connecting the audio components" (page 34).

⬇

Setting the audio output settings on the connected components

To output multi channel digital audio, check the digital audio output setting on the connected components.
For a Blu-ray Disc player, check that "Audio (HDMI)", "Dolby Digital (Coaxial/Optical)", and "DTS (Coaxial/Optical)" are set to "Auto", "Dolby Digital" and "DTS" respectively (as of March 2010).
For a "PlayStation 3", check that "BD Audio Output Format" is set to "Bitstream" (with system software version 3.15).
For details, refer to the operating instructions supplied with the connected components.

⬇

Preparing the receiver

See "8: Connecting the AC power cord (mains lead)" (page 39) and "Initializing the receiver" (page 39).

⬇

Setting the speakers

Select the speaker pattern, then perform Auto Calibration. For details, see "Setting the speakers" (page 40) and "Calibrating the appropriate speaker settings automatically (Auto Calibration)" (page 42).

Note

You can check the speaker connection using "Test Tone" (page 111). If the sound is not output correctly, check the speaker connection and make the settings explained above again.

1: Installing the speakers

This receiver allows you to use a 7.1 channel system (7 speakers and one subwoofer).

Example of speaker system configuration
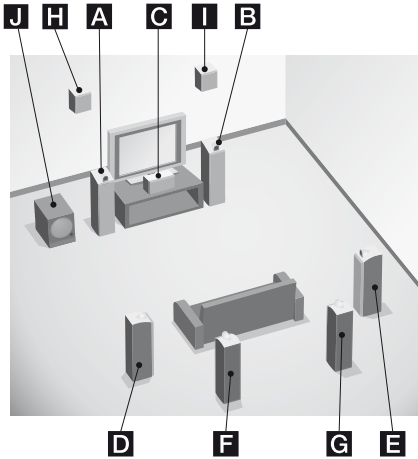
A Front speaker (Left)
B Front speaker (Right)
C Center speaker
D Surround speaker (Left)
E Surround speaker (Right)
F Surround back speaker (Left)*
G Surround back speaker (Right)*
H Front high speaker (Left)*
I Front high speaker (Right)*
J Subwoofer

* You cannot use the surround back speakers and the front high speakers simultaneously.

5.1 channel speaker system

To fully enjoy theater-like multi channel surround sound requires five speakers (two front speakers, a center speaker, and two surround speakers) and a subwoofer (5.1 channel).

7.1 channel speaker system using surround back speakers

You can enjoy high fidelity reproduction of DVD or Blu-ray Disc software recorded sound in 6.1 channel or 7.1 channel format if you connect additional one surround back speaker (6.1 channel) or two surround back speakers (7.1 channel).

7.1 channel speaker system using front high speakers

You can enjoy vertical sound effects if you connect additional two front high speakers (7.1 channel) in PLIIz mode (page 74).

Tips

- When you connect a 7.1 channel speaker system with two surround back speakers, all angle Ⓐ should be the same.
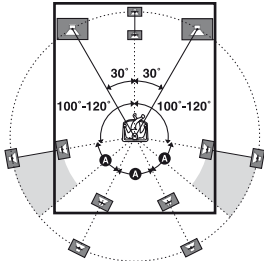
- When you connect a 7.1 channel speaker system with two front high speakers, place the front high speakers
  - at an angle between 22° to 45°.
  - at least 3.3 feet (1 meter) directly above the front speakers.
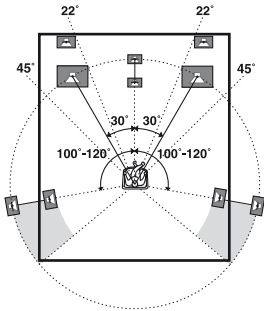
- When you connect a 6.1 channel speaker system, place the surround back speaker behind the listening position.
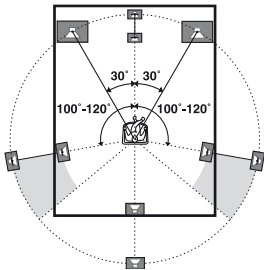
- Since the subwoofer does not emit highly directional signals, you can place it wherever you want.

2: Connecting the speakers

Before connecting cords, be sure to disconnect the AC power cord (mains lead).
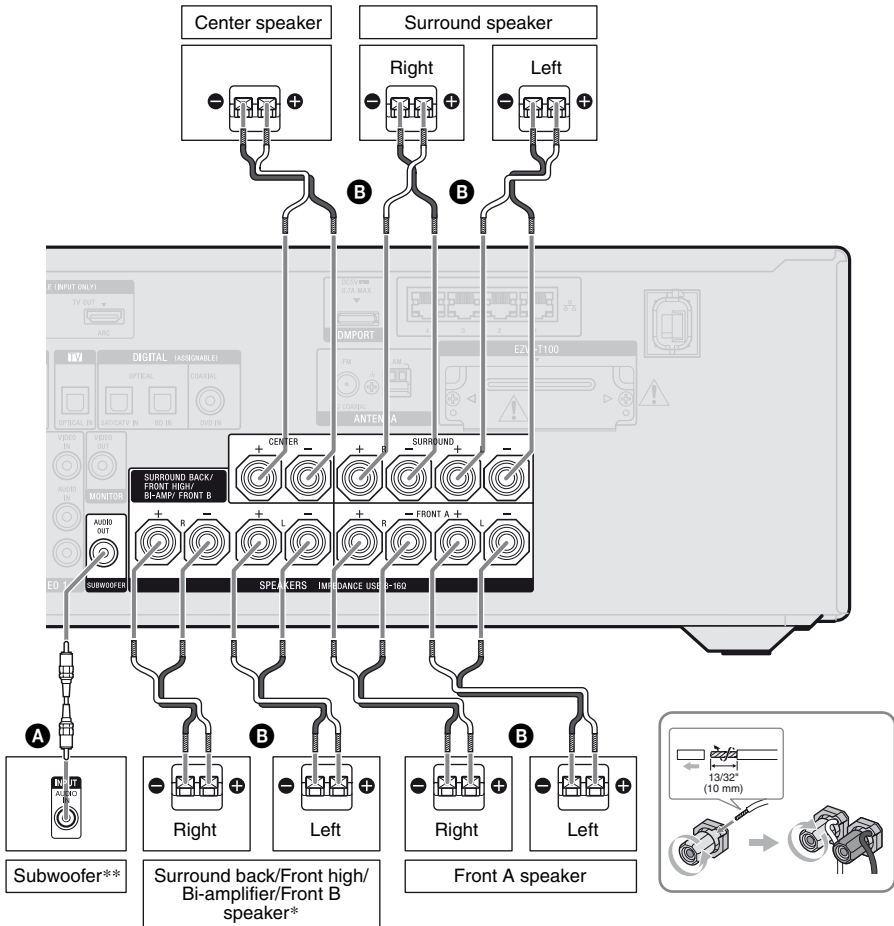
Ⓐ Monaural audio cord (not supplied)
Ⓑ Speaker cord (not supplied)

21GB

* Notes on the SPEAKERS SURROUND BACK/ FRONT HIGH/BI-AMP/FRONT B terminals connection.
  – If you connect only one surround back speaker, connect it to L of this terminals.
  – If you are not using surround back speaker or front high speakers, and you have an additional front speaker system, connect the additional front speaker system to this terminals.
    Set "Sur Back Assign" to "SPEAKER B" in the Speaker Settings menu (page 41).
    You can select the front speaker system you want using the SPEAKERS button on the receiver (page 42).
  – If you are not using surround back speaker or front high speakers, you can connect the front speakers to this terminals using bi-amplifier connection (page 22).
    Set "Sur Back Assign" to "BI-AMP" in the Speaker Settings menu (page 41).
** When you connect a subwoofer with an auto standby function, turn off the function when watching movies. If the auto standby function is set to on, it turns to standby mode automatically based on the level of the input signal to a subwoofer, then sound may not be output.

Notes
• Before connecting the AC power cord (mains lead), make sure that metallic wires of the speaker cords are not touching each other between the SPEAKERS terminals.
• After you have install and connect your speaker, be sure to select the speaker pattern from the Speaker Settings menu (page 40).

Bi-amplifier connection

If you are not using surround back speakers and front high speakers, you can connect the front speakers to the SPEAKERS SURROUND BACK/FRONT HIGH/ BI-AMP/FRONT B terminals using a bi-amplifier connection.

Front speaker (Right) Front speaker (Left)
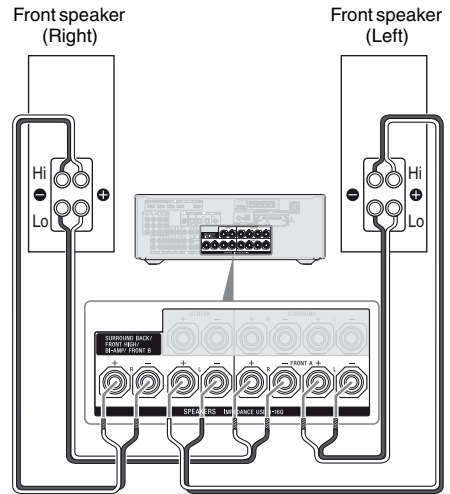
Connect the jacks on the Lo (or Hi) side of the front speakers to the SPEAKERS FRONT A terminals, and connect the jacks on the Hi (or Lo) side of the front speakers to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals.
Make sure that metal fittings of Hi/Lo attached to the speakers have been removed from the speakers. Not doing so may cause a malfunction of the receiver.
After you have made the bi-amplifier connection, set "Sur Back Assign" to "BI-AMP" in the Speaker Settings menu (page 106).

3: Connecting the TV

You can watch the selected input image when you connect the HDMI TV OUT or MONITOR OUT jack to a TV. You can operate this receiver using a GUI (Graphical User Interface).
Before connecting cords, be sure to disconnect the AC power cord (mains lead).
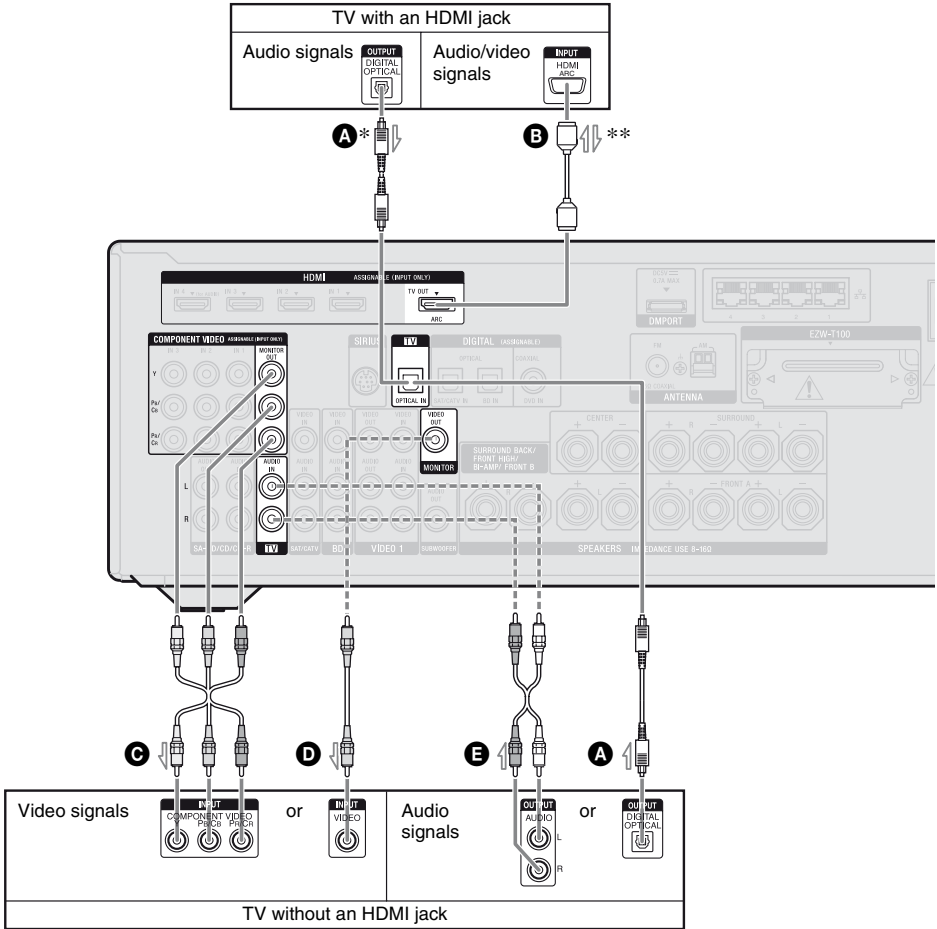
Connections

Ⓐ Optical digital cord (not supplied)
Ⓑ HDMI cable (not supplied)
Sony recommends that you use an HDMI-authorized cable or Sony HDMI cable.
Ⓒ Component video cord (not supplied)
Ⓓ Video cord (not supplied)
Ⓔ Audio cord (not supplied)

—— Recommended connection
- - - - Alternative connection

continued

23GB

* If you connect the receiver to the ARC compatible TV's HDMI jack via an HDMI cable, you do not need to connect the TV to the receiver with the optical digital cord.
**If you connect the receiver to the ARC compatible TV, the TV sound will output from the speakers connected to the receiver via the HDMI TV OUT jack. In this case, set "Control for HDMI" to "ON" in HDMI Settings menu (page 90). If you want to select an audio signal using other than an HDMI cable (e.g., via an optical digital cord or an audio cord), switch the audio input mode using INPUT MODE (page 103).

To enjoy TV multi channel surround sound broadcasting from the speakers connected to the receiver

Connect the OPTICAL output jack of the TV to the TV OPTICAL IN jack of the receiver. If your TV is compatible with ARC function, use HDMI connection.

Set the sound output jack of the TV to "Fixed" if it can be switched between either "Fixed" or "Variable".

Notes
• Be sure to turn on the receiver when the video and audio signals of a playback component are being output to a TV via the receiver. If the power supply of the receiver is not turned on, neither video nor audio signals will be transmitted.
• Connect image display components such as a TV monitor or a projector to the HDMI TV OUT or MONITOR OUT jack on the receiver. You may not be able to record, even if you connect recording components.
• Depending on the status of the connection between the TV and the antenna (aerial), the image on the TV screen may be distorted. In this case, place the antenna (aerial) farther away from the receiver.
• When connecting optical digital cords, insert the plugs straight in until they click into place.
• Do not bend or tie optical digital cords.

Tips
• All the digital audio jacks are compatible with 32 kHz, 44.1 kHz, 48 kHz, and 96 kHz sampling frequencies.
• The receiver has a video conversion function. For details, see "Function for conversion of video signals" (page 33).

4a: Connecting the video components

Connecting components with HDMI jacks

HDMI is the abbreviated name for High-Definition Multimedia Interface. It is an interface which transmits video and audio signals in digital format.
By connecting Sony "BRAVIA" Sync-compatible components using HDMI cables, operations can be simplified. See ""BRAVIA" Sync Features" (page 89).

HDMI features

- A digital audio signals transmitted by HDMI can be output from the speakers connected to the receiver. This signal supports Dolby Digital, DTS, and Linear PCM. For details, see "Digital audio formats supported by the receiver" (page 76).
- The receiver can receive Multi Linear PCM (up to 8 channels) with a sampling frequency of 192 kHz or less with an HDMI connection.
- Analog video signals input to the VIDEO jack or COMPONENT VIDEO jacks can be output as HDMI signals (page 33). Audio signals are not output from an HDMI TV OUT jack when the image is converted.
- This receiver supports High Bitrate Audio (DTS-HD Master Audio, Dolby TrueHD), Deep Color (Deep Colour), x.v.Color (x.v.Colour) and 3D transmission.
- This receiver supports the Control for HDMI function. For details, see ""BRAVIA" Sync Features" (page 89).
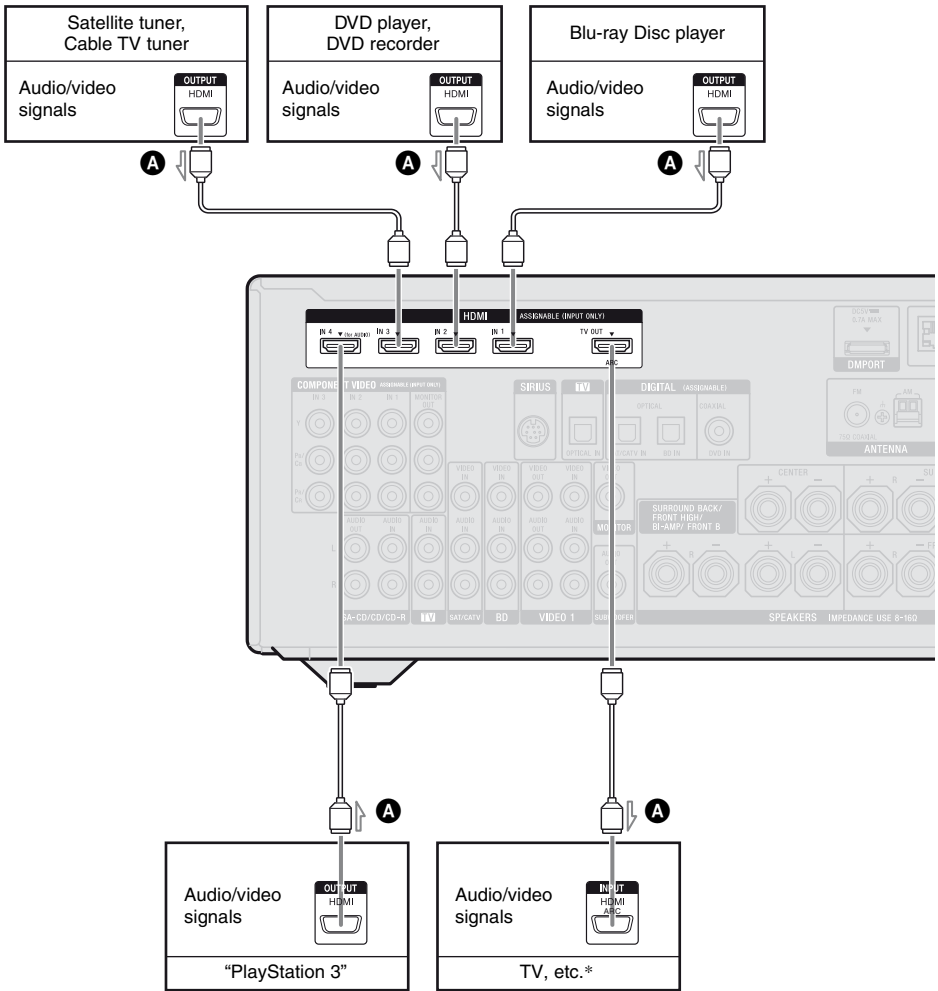
Ⓐ HDMI cable (not supplied)

Sony recommends that you use an HDMI-authorized cable or Sony HDMI cable.

* For details on the audio connection of TV to the receiver, see page 23.

Notes

- HDMI 4 input has a better sound quality. When you need a higher sound quality, connect your component to the HDMI IN 4 (for AUDIO) jack and select HDMI 4 as input.
- Be sure to change the initial setting of the HDMI 1–4 input button on the remote so that you can use the button to control your components. For details, see "Programming the remote" (page 130).

- You can also rename the HDMI input so that it can be displayed on the TV screen and display. For details, see "Naming the input (Name Input)" (page 55).

Notes on connecting cables

- Use a High Speed HDMI cable. If you use a Standard HDMI cable, 1080p, Deep Color (Deep Colour) or 3D images may not be displayed properly.
- We do not recommend using an HDMI-DVI conversion cable. When you connect an HDMI-DVI conversion cable to a DVI-D component, the sound and/or the image may not be output. Connect other audio cords or digital connecting cords, then set "Input Assign" in the Input Option menu when the sound is not output correctly.
- Before connecting cables, make sure to disconnect the AC power cord (mains lead).

Notes on HDMI connections

- An audio signal input to the HDMI IN jack is output from the SPEAKERS terminals, HDMI TV OUT jack and PHONES jack. It is not output from any other audio jacks.
- Video signals input to the HDMI IN jack can only be output from the HDMI TV OUT jack. The video input signals cannot be output from the VIDEO OUT jacks or MONITOR OUT jacks.
- The audio and video signals of HDMI input are not output from the HDMI TV OUT jack while the GUI menu is displayed.
- When you want to listen to the sound from the TV speaker, set "Audio Out" to "TV+AMP" in the HDMI Settings menu (page 117). If you cannot play back multi channel audio source, set to "AMP". However, the sound will not output from the TV speaker.
- DSD signals of Super Audio CD are not input and output.
- Be sure to turn on the receiver when the video and audio signals of a playback component are being output to a TV via the receiver. If you set "Pass Through" to "OFF", video and audio signals will not be transmitted when the power is turned off.

- Audio signals (format, sampling frequency, bit length, etc.) transmitted from an HDMI jack may be suppressed by the connected component. Check the setup of the connected component if the image is poor or the sound does not come out of a component connected via the HDMI cable.
- Sound may be interrupted when the sampling frequency, the number of channels or audio format of audio output signals from the playback component is switched.
- When the connected component is not compatible with copyright protection technology (HDCP), the image and/or the sound from the HDMI TV OUT jack may be distorted or may not be output. In this case, check the specification of the connected component.
- You can enjoy High Bitrate Audio (DTS-HD Master Audio, Dolby TrueHD), multi channel Linear PCM only with an HDMI connection.
- Set the image resolution of the playback component to more than 720p/1080i to enjoy High Bitrate Audio (DTS-HD Master Audio, Dolby TrueHD).
- The image resolution of playback component may need certain settings be made before you can enjoy multi channel Linear PCM. Refer to the operating instructions of the playback component.
- To enjoy 3D images, connect 3D-compatible TV and video components (Blu-ray Disc player, Blu-ray Disc recorder, "PlayStation 3", etc.) to the receiver using High Speed HDMI cables, put on 3D glasses, and then play back a 3D-compatible content.
- Depending on the TV or the video component, 3D images may not be displayed. Check the 3D image formats supported by the receiver (page 146).
- Not every HDMI component supports all functions that are defined by the specified HDMI version. For example, components that support HDMI, version 1.4, may not support Audio Return Channel (ARC).
- Refer to the operating instructions of each connected component for details.

Connecting components without HDMI jacks

Connect your video components according to the table below.

Component	Page
Blu-ray Disc player	29
DVD player	30
DVD recorder	30, 32
Satellite tuner, Cable TV tuner	31
VCR	32
Camcorder, video game, etc.	32

If you want to connect several digital components, but cannot find an unused input

See "Enjoying the sound/images from other inputs (Input Assign)" (page 104).

Converting video signals

This receiver is equipped with a function for converting video signals. For details, see "Function for conversion of video signals" (page 33).

Notes

- Before connecting cords, be sure to disconnect the AC power cord (mains lead).
- It is not necessary to connect all the cords. Connect according to the availability of jacks on the connected components.
- Be sure to turn on the receiver when the video and audio signals of a playback component are being output to a TV via the receiver. If the power supply of the receiver is not turned on, neither video nor audio signals will be transmitted.
- When connecting optical digital cords, insert the plugs straight in until they click into place.
- Do not bend or tie optical digital cords.

Tip

All the digital audio jacks are compatible with 32 kHz, 44.1 kHz, 48 kHz, and 96 kHz sampling frequencies.

To connect a Blu-ray Disc player
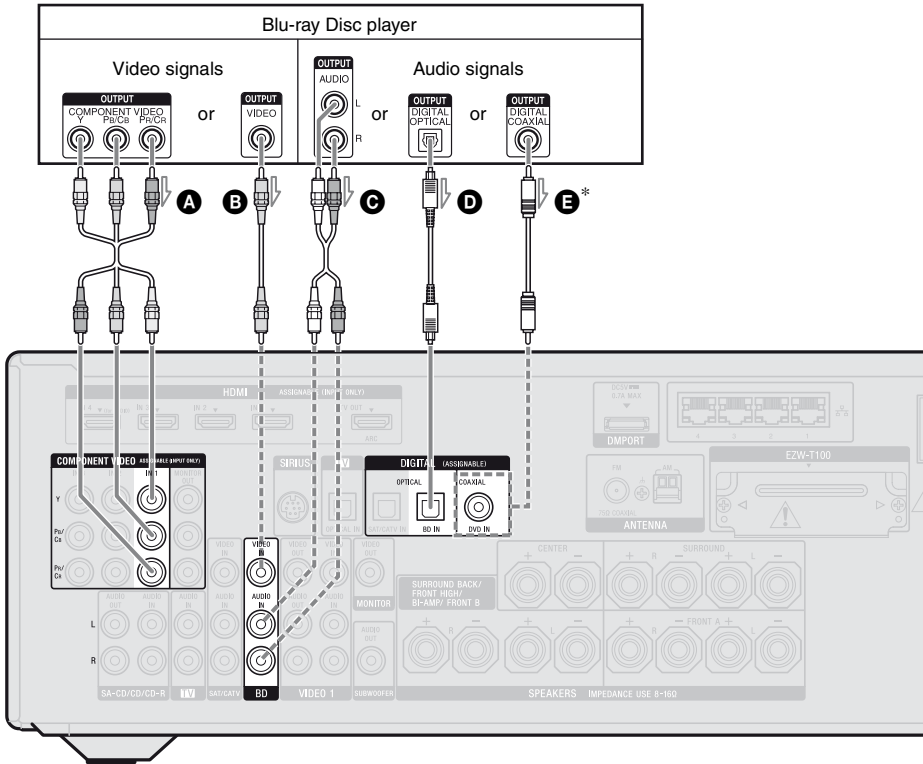
Ⓐ Component video cord (not supplied)
Ⓑ Video cord (not supplied)
Ⓒ Audio cord (not supplied)
Ⓓ Optical digital cord (not supplied)
Ⓔ Coaxial digital cord (not supplied)

———— Recommended connection
------ Alternative connection

* When you connect a component equipped with an COAXIAL jack, set "Input Assign" in the Input Option menu (page 104).

Notes

• The initial setting of the COMPONENT VIDEO IN 1 jacks are Blu-ray Disc player. If you want to connect your Blu-ray Disc player to the COMPONENT VIDEO IN 2 or IN 3 jacks, set "Input Assign" in the Input Option menu (page 104).

• To input multi channel digital audio from the Blu-ray Disc player, set the digital audio output setting on the Blu-ray Disc player. Refer to the operating instructions supplied with the Blu-ray Disc player.

To connect a DVD player, DVD recorder
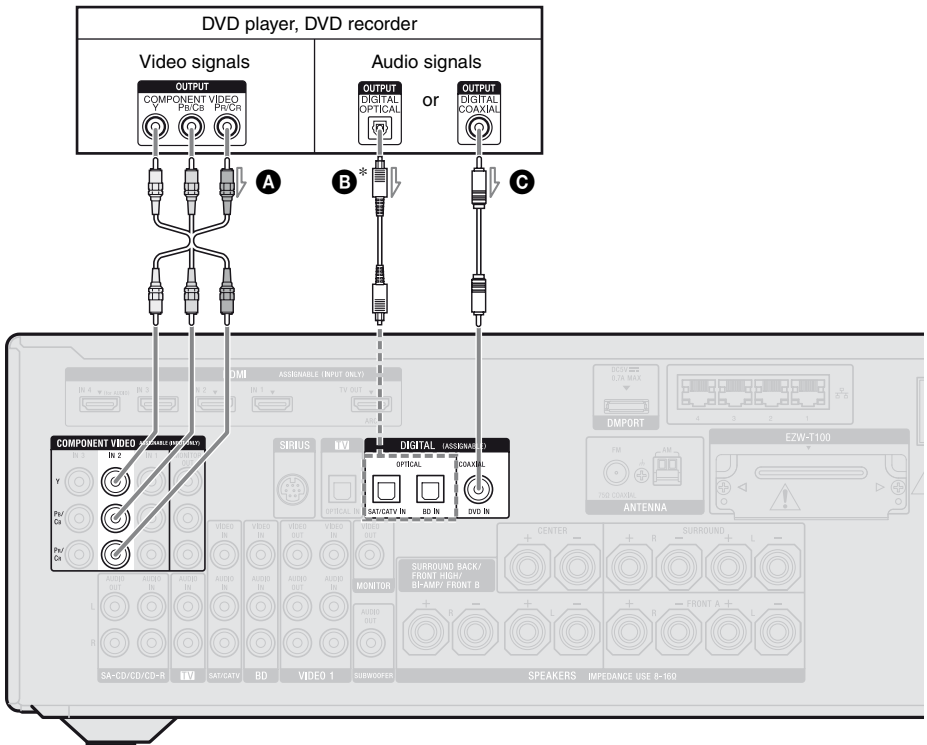
Ⓐ Component video cord (not supplied)
Ⓑ Optical digital cord (not supplied)
Ⓒ Coaxial digital cord (not supplied)

——— Recommended connection
----- Alternative connection

* When you connect a component equipped with an OPTICAL jack, set "Input Assign" in the Input Option menu (page 104).

Notes

• The initial setting for the DVD input button is as follows:
  – RM-AAP055: DVD player
  – RM-AAP056: DVD recorder
  To control other components, be sure to change the initial setting of the DVD input button on the remote. For details, see "Programming the remote" (page 130).
• You can also rename the DVD input so that it can be displayed on the TV screen and display. For details, see "Naming the input (Name Input)" (page 55).

• The initial setting of the COMPONENT VIDEO IN 2 jacks are DVD player or DVD recorder. If you want to connect your DVD player or DVD recorder to the COMPONENT VIDEO IN 1 or IN 3 jacks, set "Input Assign" in the Input Option menu (page 104).
• To input multi channel digital audio from the DVD player or DVD recorder, set the digital audio output setting on the DVD player or DVD recorder. Refer to the operating instructions supplied with the DVD player or DVD recorder.

To connect a satellite tuner, cable TV tuner
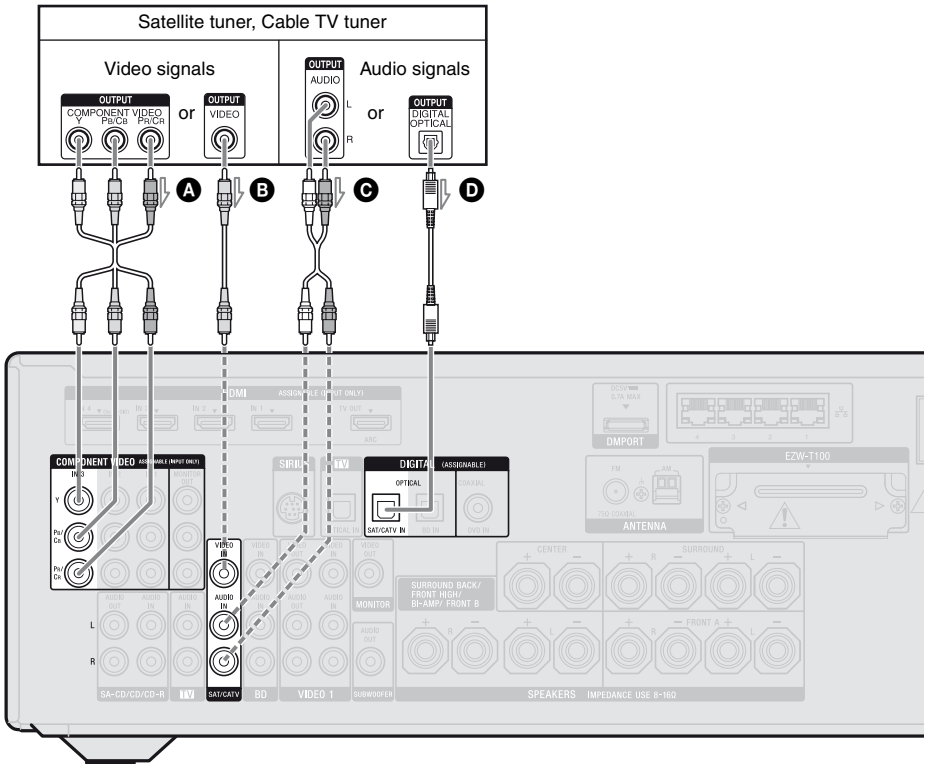
Ⓐ Component video cord (not supplied)
Ⓑ Video cord (not supplied)
Ⓒ Audio cord (not supplied)
Ⓓ Optical digital cord (not supplied)

——— Recommended connection
----- Alternative connection

Note
The initial setting of the COMPONENT VIDEO IN 3 jacks are satellite tuner or cable TV tuner. If you want to connect your satellite tuner or cable TV tuner to the COMPONENT VIDEO IN 1 or IN 2 jacks, set "Input Assign" in the Input Option menu (page 104).

To connect components with analog video and audio jack

The following illustration shows how to connect a component which has analog jacks such as a DVD recorder, VCR, etc.
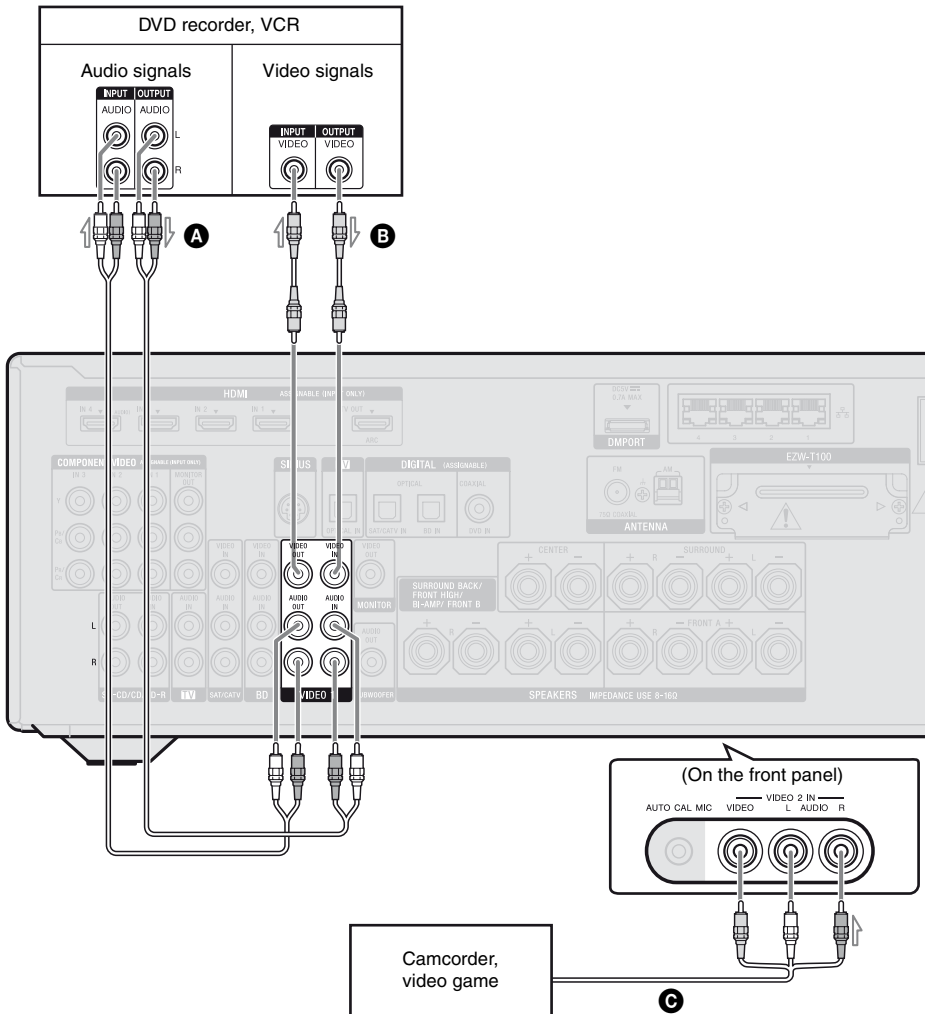
Ⓐ Audio cord (not supplied)
Ⓑ Video cord (not supplied)
Ⓒ Audio/video cord (not supplied)

Notes

• Be sure to change the initial setting of the VIDEO 1 input button on the remote so that you can use the button to control your DVD recorder. For details, see "Programming the remote" (page 130).

• You can also rename the VIDEO 1 input so that it can be displayed on the TV screen and display. For details, see "Naming the input (Name Input)" (page 55).

Function for conversion of video signals

The receiver is equipped with a function for converting video signals.
- Composite video signals can be output as HDMI video and component video signals
- Component video signals can be output as HDMI video and video signals.

OUTPUT jack INPUT jack	HDMI TV OUT	COMPONENT VIDEO MONITOR OUT	MONITOR VIDEO OUT
HDMI IN*	○	–	–
VIDEO IN	○	○	○
COMPONENT VIDEO IN	○	○	○

○ : Video signals are output.
– : Video signals are not output.
* HDMI video signals cannot be converted to component video signals and video signals.

As the initial setting, video signals input from the connected component are output as shown in the table above. We recommend that you set the video conversion function to match the resolution of the monitor you are using. For details, see "Video Settings menu" (page 116).

Notes on converting video signals

- When video signals from a VCR, etc., are converted on this receiver and then output to your TV, depending on the status of the video signal output, the image on the TV screen may appear distorted horizontally or no image may be output.
- The converted video signals are not output from the VIDEO OUT jack.
- When you play back a VCR with an image improvement circuit, such as TBC, the images may be distorted or may not be output. In this case, set the image improvement circuit function to off.
- The resolution of the signals output to the COMPONENT VIDEO MONITOR OUT jacks is converted up to 1080i. The resolution of the signals output to the HDMI TV OUT jack is converted up to 1080p.
- COMPONENT VIDEO MONITOR OUT jacks have restrictions on resolution when the resolution of video signals protected by copyright technology is converted. Resolution of up to 480p/576p can be output to the COMPONENT VIDEO MONITOR OUT jacks. The HDMI TV OUT jack has no restriction on resolution.

- Video signals for which the resolution has been converted cannot be output from the COMPONENT VIDEO MONITOR OUT jacks or the HDMI TV OUT jack simultaneously. The video signals are output from the HDMI TV OUT jack when both are connected.
- Set "Resolution" to "Auto" or "480i/576i" in the Video Settings menu to output the video signals from the MONITOR VIDEO OUT, COMPONENT VIDEO MONITOR OUT jacks when both are connected.
- Converted HDMI image output does not support x.v.Color (x.v.Colour), Deep Color (Deep Colour) and 3D image.

To connect a recording component

When recording, connect the recording component to the VIDEO OUT jacks of the receiver. Connect cords for input and output signals to the same type of jack, as VIDEO OUT jacks do not have an up-conversion function.

Note

Signals output from the HDMI TV OUT or MONITOR OUT jacks may not be recorded properly.

4b: Connecting the audio components

The following illustration shows how to connect a Super Audio CD player, CD player, CD recorder and DIGITAL MEDIA PORT adapter. Before connecting cords, be sure to disconnect the AC power cord (mains lead).
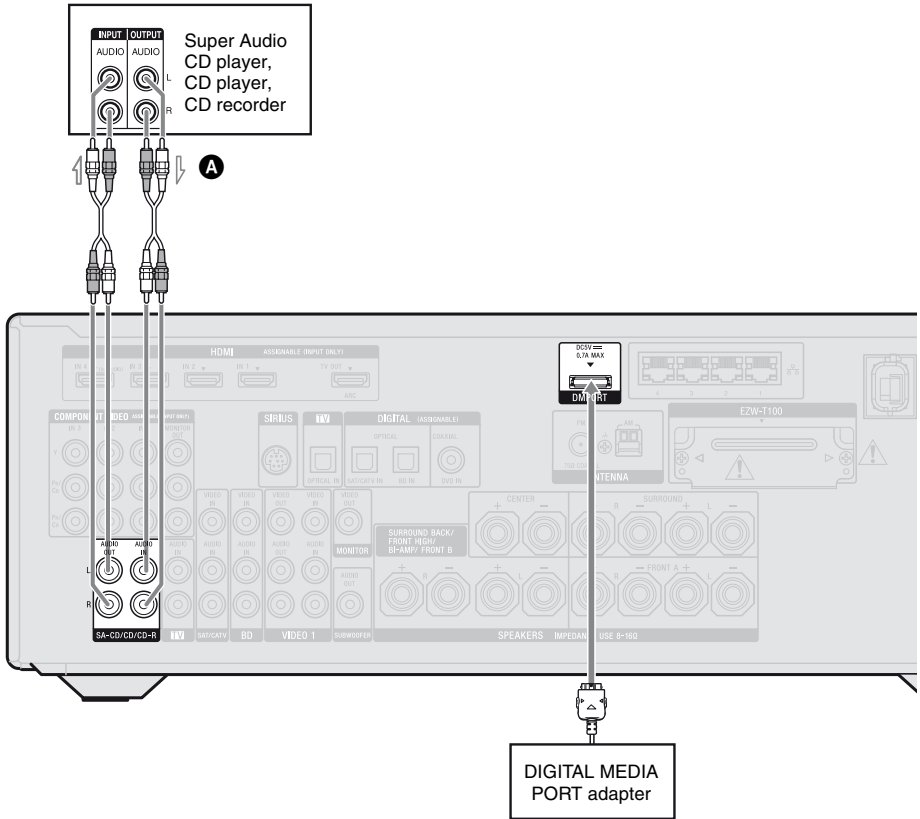
A Audio cord (not supplied)

Notes on connecting DIGITAL MEDIA PORT adapter

- Do not connect or disconnect the DIGITAL MEDIA PORT adapter while the receiver is turned on.
- Be sure to make DMPORT connections firmly, insert the connector straight in.

- As the connector of the DIGITAL MEDIA PORT adapter is fragile, be sure to handle with care when placing or moving the receiver.
- When connecting the DIGITAL MEDIA PORT adapter, be sure the connector is inserted with the arrow mark facing towards the arrow mark on the DMPORT jack.

To detach the DIGITAL MEDIA PORT adapter from DMPORT jack
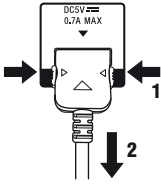
Press and hold both sides of the connector and then pull out the connector.

5: Connecting the antennas (aerials)

Connect the supplied AM loop antenna (aerial) and FM wire antenna (aerial). Before connecting the antennas (aerials), be sure to disconnect the AC power cord (mains lead).

FM wire antenna (aerial) (supplied)

AM loop antenna (aerial) (supplied)
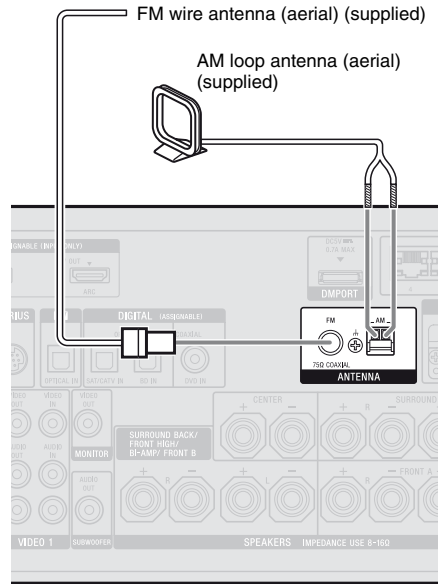
Notes
• To prevent noise pickup, keep the AM loop antenna (aerial) away from the receiver and other components.
• Be sure to fully extend the FM wire antenna (aerial).
• After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

6: Inserting the wireless transmitter/transceiver

To use the S-AIR function, you need to insert the wireless transmitter (not supplied) into the S-AIR main unit (this receiver) and the wireless transceiver (not supplied) into the S-AIR sub unit.

Notes
- Before inserting the wireless transmitter/transceiver, be sure to disconnect the AC power cord (mains lead).
- Do not touch the terminals of the wireless transmitter/transceiver.

To insert the wireless transmitter into the S-AIR main unit

1 Remove the screws and detach the slot cover.
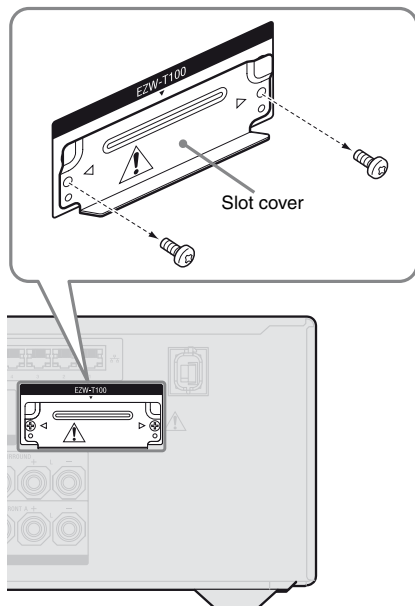
Slot cover

Notes
- Remove the screws on the slot cover pointed with ◁ and ▷ marks. Do not remove other screws.
- The slot cover is no longer necessary. However, keep it after detaching.

2 Insert the wireless transmitter.

EZW-T100 slot

Wireless transmitter
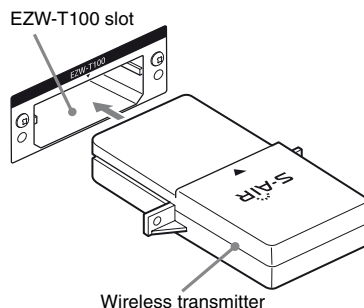
Notes
- Insert the wireless transmitter with the S-AIR logo facing up.
- Insert the wireless transmitter so that the ▼ marks are aligned.
- Do not insert other than the wireless transmitter into the EZW-T100 slot.

3 Use the screws that you removed from step 1 to fasten the wireless transmitter.
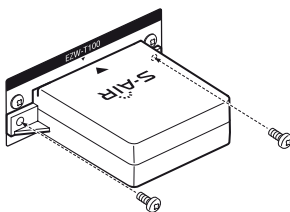
Note
Do not use other screws to fasten the wireless transmitter.

To insert the wireless transceiver into the S-AIR sub unit

Refer to the operating instructions supplied with the surround amplifier and S-AIR receiver.

7: Connecting to the network

Configuring your home network with DLNA-compliant devices.
If your computer is connected to the Internet, you can connect this receiver to the Internet as well, through the wired LAN connection.

Note

The method used to connect your computer to the Internet depends on the devices, your ISP, your computer, and the router used.

System requirements

The following system environment is required to use the network function of the receiver.

A Broadband line connection

A Broadband line connection to the Internet is required in order to listen to Rhapsody® or SHOUTcast and to use the software update function of the receiver. Rhapsody is only available in the U.S.

Modem

This is the device that is connected to the broadband line to communicate with the Internet. Some of these devices are integrated with the router.

Router

- Use a router compatible with 100 Mbps or greater transmission speeds to enjoy content on your home network.
- We recommend that you use a router equipped with the built-in DHCP (Dynamic Host Configuration Protocol) server. This function automatically assigns IP addresses on the LAN.

LAN cable (CAT5)

- We recommend that you use this type of cable for a wired LAN.
  Some flat-type LAN cables are easily affected by noise. We recommend that you use normal-type cables.
- If the receiver is used in an environment in which there is power supply noise from electric products or in a noisy network environment, use a shielded-type LAN cable.

Configuration example

The following illustration is a configuration example of a home network with the receiver, a computer.
We recommend that you use a wired connection.
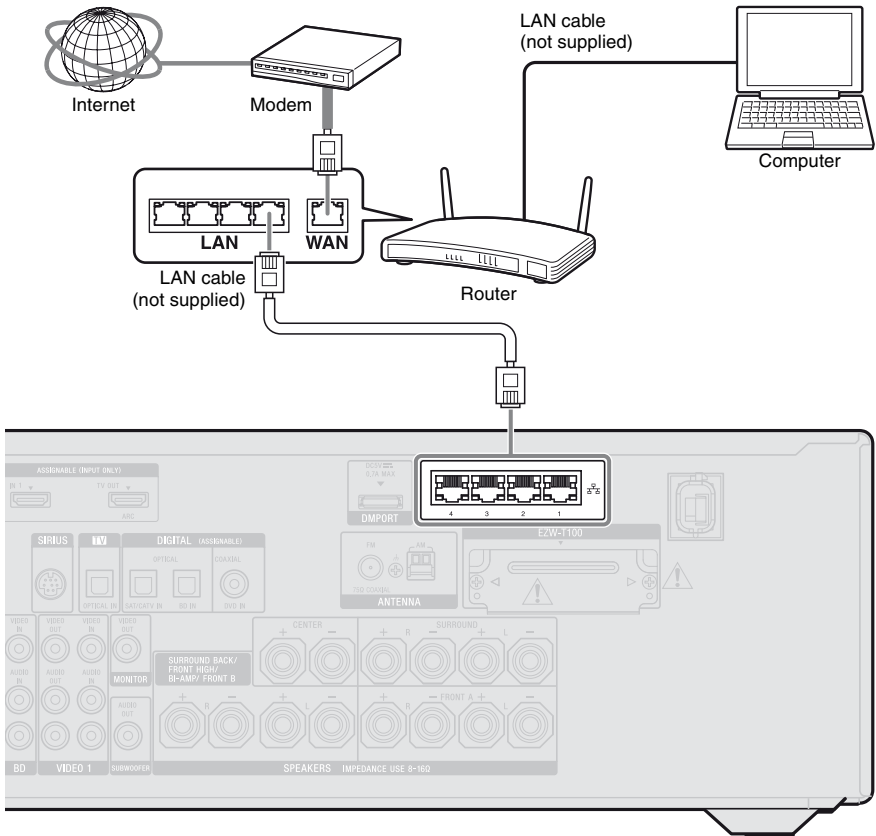
Notes

• An audio or video playback on the computer may occasionally be interrupted when you use a wireless connection.
• Connect a router to one among ports 1 to 4 of the receiver using only one LAN cable. Do not connect the same router to the receiver using more than one LAN cable. It may cause a malfunction.

8: Connecting the AC power cord (mains lead)

Connect the AC power cord (mains lead) to a wall outlet.

Notes

• Before connecting the AC power cord (mains lead), make sure that metallic wires of the speaker cords are not touching each other between the SPEAKERS terminals.
• Connect the AC power cord (mains lead) firmly.

AC power cord (mains lead)

To the wall outlet
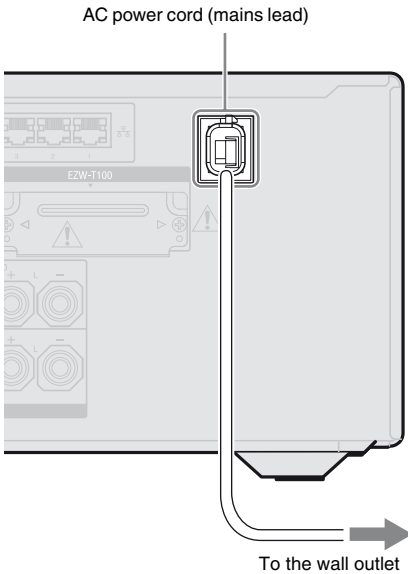
Initializing the receiver

Before using the receiver for the first time, initialize the receiver by performing the following procedure. This procedure can also be used to return settings you have made to their initial settings.

Be sure to use the buttons on the receiver for this operation.

I/$\circlearrowleft$
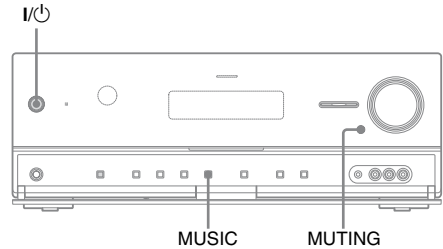
MUSIC   MUTING

1 Press I/$\circlearrowleft$ to turn off the receiver.

2 Hold down MUTING and MUSIC, then press I/$\circlearrowleft$ to turn on the receiver.

3 Release MUTING and MUSIC after a few seconds.

After "CLEARING" appears on the display for a while, "CLEARED!" appears.
All the settings you have changed or adjusted are reset to the initial settings.

Note

It takes about 30 seconds for the memory to be cleared completely. Do not turn the receiver off until "CLEARED!" appears on the display.

To reboot the receiver

If the buttons on the receiver or the remote do not work due to a malfunction of the receiver, reboot the receiver.

1 Press I/(¹) to turn off the receiver.

2 Hold down I/(¹) until the white indicator flashes.
The receiver is rebooted.

Setting the speakers

Selecting the speaker pattern

Select the speaker pattern according to the speaker system which you are using.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

Input ▸	BD
♫	DVD
▣	SAT/CATV
	TV
▦	Video1
⊘	Video2
▾	SA-CD/CD

2 Press ♦/♦ repeatedly to select "⚒ Settings", then press ⊕ or ➥.

The Settings menu list appears on the TV screen.

	Auto Calibration
	Speaker
	Surround
	EQ
	Audio
	Video
⚒ ▸	HDMI
	▾
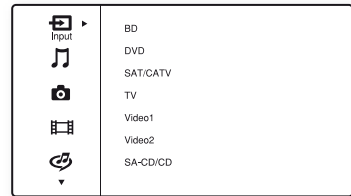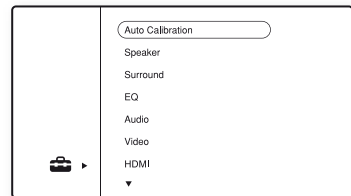
3 Press ↑/↓ repeatedly to select "Speaker", then press ⊕.
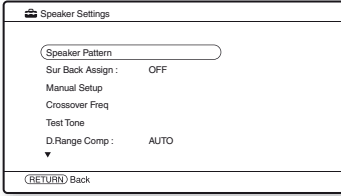
4 Press ↑/↓ repeatedly to select "Speaker Pattern", then press ⊕.
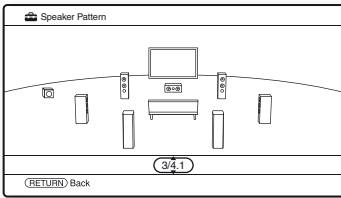
5 Press ↑/↓ repeatedly to select the speaker pattern you want, then press ⊕.

6 Press RETURN/EXIT ♂⌐.

Setting the surround back speakers

You can switch the usage of the speaker(s) connected to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals in accordance with the intended use.

Notes
• This setting is only available if the "Speaker Pattern" is set to a setting without surround back and front high speakers.
• Be sure to set "Sur Back Assign" before you perform Auto Calibration.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ↑/↓ repeatedly to select "🛠 Settings", then press ⊕ or ➡.

The Settings menu list appears on the TV screen.

3 Press ↑/↓ repeatedly to select "Speaker", then press ⊕.

4 Press ↑/↓ repeatedly to select "Sur Back Assign", then press ⊕.

5 Press ↑/↓ repeatedly to select the parameter you want, then press ⊕.

• OFF
If you connect surround back or front high speakers to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals, select "OFF".

• BI-AMP
If you connect front speakers to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals using a bi-amplifier connection, select "BI-AMP".

• SPEAKER B
If you connect an additional front speaker system to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals, select "SPEAKER B".

6 Press RETURN/EXIT ♂⌐.

Selecting the front speaker system

You can select the front speakers you want to drive.
Be sure to use the buttons on the receiver for this operation.
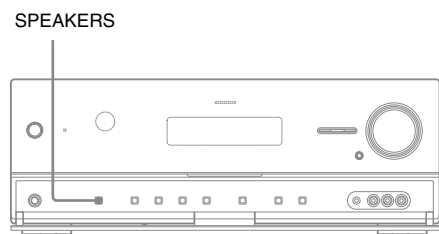
SPEAKERS

Press SPEAKERS repeatedly to select the front speaker system you want to drive.

You can confirm the selected speakers terminals by checking the indicator on the display.

When select the front speakers connected to	Light up
The SPEAKERS FRONT A terminals	SP A
The SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals	SP B*
Both the SPEAKERS FRONT A and SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals (parallel connection)	SP A B*

* To select "SP B" or "SP A B", set "Sur Back Assign" to "SPEAKER B" in the Speaker Settings menu (page 41).

To turn off the speaker output

Press SPEAKERS repeatedly until the "SP A" and "SP B" indicators on the display do not light up. "SPK OFF" appears on the display.

Note
You cannot switch the front speaker system by pressing SPEAKERS when the headphones are connected.

Calibrating the appropriate speaker settings automatically
(Auto Calibration)

This receiver is equipped with DCAC (Digital Cinema Auto Calibration) function which allows you to perform automatic calibration as follows:
- Check the connection between each speaker and the receiver.
- Adjust the speaker level.
- Measure the distance of each speaker from your seating position.[a)b)]
- Measure the speaker size.[a)]
- Measure the speaker polarity.[a)]
- Measure the frequency characteristics.[a)c)]

[a)] The measurement result is not utilized when "A. DIRECT" is selected.
[b)] The measurement result is not utilized when signals with a sampling frequency of more than 96 kHz are being received.
[c)] The measurement result is not utilized when signals with a sampling frequency of more than 48 kHz are being received.

The DCAC is designed to obtain proper sound balance in your room. However, you can adjust the speaker levels manually according to your preference. For details, see "Test Tone" (page 111).

Before you perform Auto Calibration

Before you perform Auto Calibration, check the following items.
- Set up and connect the speakers (page 19, 21).
- Connect only the supplied optimizer microphone to the AUTO CAL MIC jack. Do not connect other microphones to this jack.
- Set "Sur Back Assign" to "BI-AMP" in the Speaker Settings menu if you use bi-amplifier connection (page 106).
- Set "Sur Back Assign" to "SPEAKER B" in the Speaker Settings menu if you use speakers front B connection (page 41).
- Pair the surround amplifier to S-AIR main unit if you want to use surround amplifier.
- Make sure the speaker output is not set to "SPK OFF" (page 42).
- Disconnect the headphones.
- Remove any obstacles in the path between the optimizer microphone and the speakers to avoid measurement errors.
- Make sure the environment is quiet to avoid the effect of noise and get a more accurate measurement.
- Select the seating position as position 1, 2 or 3 to save the Auto Calibration result (page 108).

Notes
- During the measurement, the sound that comes out of the speakers is very loud. The volume of the sound cannot be adjusted. Pay attention to the presence of children or to the effect on your neighborhood.
- If the muting function has been activated before you perform Auto Calibration, the muting function will be set to off automatically.
- The measurements may not be performed correctly or Auto Calibration cannot be performed when special speakers, such as dipole speakers are used.

1: Setting up the Auto Calibration

Optimizer microphone

AUTO CAL MIC
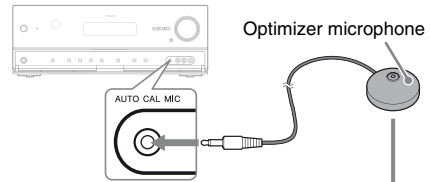
Example of using surround back speakers
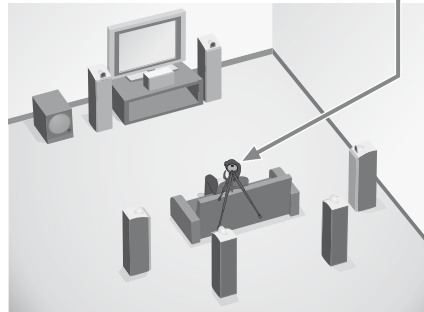
1 Select the speaker pattern (page 40).

If you connect front high speakers, select the speaker pattern that has front high speakers (5/■.■ or 4/■.■) each time you perform Auto Calibration. Otherwise, the characteristics of the front high speakers cannot be measured.

2 Connect the supplied optimizer microphone to the AUTO CAL MIC jack.

3 Set up the optimizer microphone.

Place the optimizer microphone at your seating position. Use a stool or tripod so that the optimizer microphone remains at the same height as your ears.

On setting up the active subwoofer

- When a subwoofer is connected, turn on the subwoofer and turn up the volume beforehand. Turn the LEVEL to just before the mid-point.
- If you connect a subwoofer with a crossover frequency function, set the value to maximum.
- If you connect a subwoofer with an auto standby function, set it to off (deactivated).
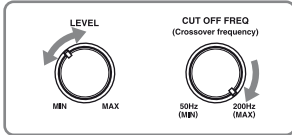
Note

Depending on the characteristics of the subwoofer you are using, the setup distance value may be further away from the actual position.

2: Performing Auto Calibration
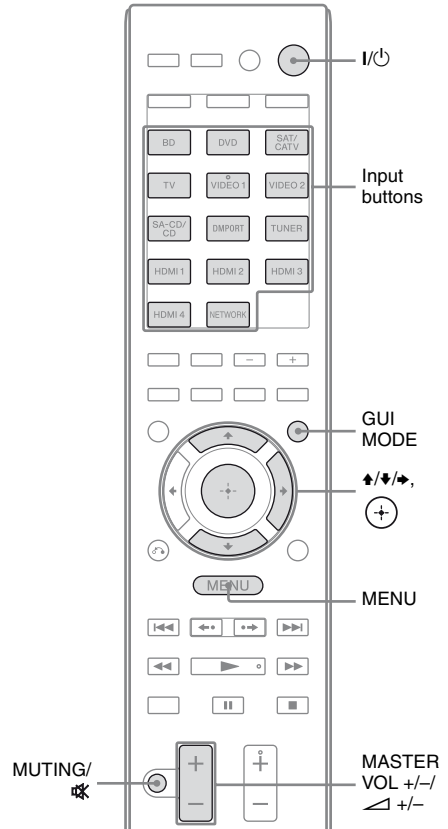
1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ♦/♦ repeatedly to select "⚒ Settings", then press ⊕ or ➡.

The Settings menu list appears on the TV screen.

3 Press ▲/▼ repeatedly to select "Auto Calibration", then press ⊕.

4 Press ▲/▼ repeatedly to select "Calibration Start", then press ⊕.

The screen on which you can select the item to be measured appears.
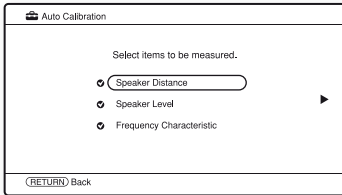
5 Press ▲/▼ repeatedly and ⊕ to uncheck the items you do not want to measure, then press ➔.

The confirmation screen, asking whether you are ready to start measurement, appears.
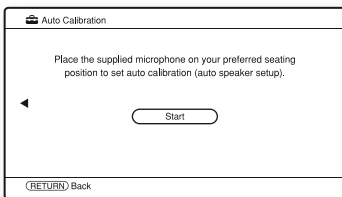
6 Press ⊕ to select "Start".

The measurement starts in five seconds. The measurement process will take approximately 30 seconds with a test tone. Wait until the measurement process completes.

When the measurement ends, a beep sounds and the screen switches.
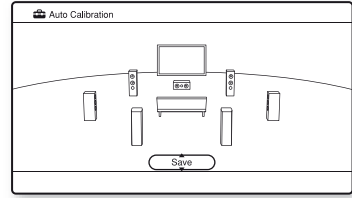
Note

If an error code appears on the screen, see "Message list after Auto Calibration measurement" (page 48).

7 Press ▲/▼ repeatedly to select the item you want, then press ⊕.

Item and explanation

Retry
Performs the Auto Calibration again.

Save
Saves the measurement results and exits the setting process (page 46).

Warning
Displays warning concerning the measurement results. See "Message list after Auto Calibration measurement" (page 48).

Phase＊
Displays the phase of each speaker (in phase/out of phase).

Distance
Displays the measurement result for speaker distance.

Level
Displays the measurement result for speaker level.

Exit
Exits the setting process without saving the measurement results.

To save the measurement results, follow the steps in "3: Saving the measurement results" (page 46).

If you want to check error code or warning message, see "Message list after Auto Calibration measurement" (page 48).

* When the speaker(s) is (are) out of the phase, "Out" is displayed on the TV screen. The "+" and "–" terminals of the speaker may be connected the other way around. However, depending on the speakers, "Out" appears on the TV screen even though the speakers are connected properly. This is because of the speakers' specifications. In this case, you can continue to use the receiver.

Tips

• Operations other than turning the receiver on or off are deactivated during the measurement.
• You can change the unit of distance in "Distance Unit" in the Speaker settings menu (page 113).

To cancel Auto Calibration

The Auto Calibration function will be canceled when you do the following during the measurement process:
– Press I/(¹).
– Press the input buttons on the remote or press the INPUT SELECTOR +/– repeatedly on the receiver.
– Press MUTING (RM-AAP055 only) or ⬩ (RM-AAP056 only) on the remote. Press MUTING on the receiver.
– Press SPEAKERS on the receiver.
– Change the volume level.
– Connect the headphones.

3: Saving the measurement results

To save the measurement results obtained in "2: Performing Auto Calibration" (page 44), proceed with the following steps.

1 Press ↑/↓ to select "Save" in step 7 in "2: Performing Auto Calibration" (page 45), then press (+).

The selecting screen of the calibration type appears.
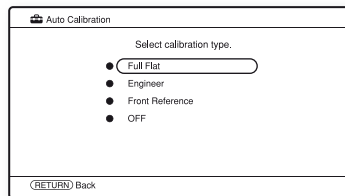
2 Press ↑/↓ repeatedly to select the calibration type, then press (+).

• Full Flat
Makes the measurement of frequency from each speaker flat.
• Engineer
Sets the frequency to one that matches that of the Sony listening room standard.
• Front Reference
Adjusts the characteristics of all the speakers to match the characteristics of the front speaker.
• OFF
Sets the Auto Calibration equalizer level to off.

The measurement results are saved.

3 Disconnect the optimizer microphone after you have finished.

Note

If you have reposition your speaker, we recommend that you perform Auto Calibration again to enjoy the surround sound.

Tip

The size of a speaker ("Large"/"Small") is determined by the low frequency characteristics. The measurement results may vary, depending on the position of the optimizer microphone and speakers, and the shape of the room. It is recommended that you follow the measurement results. However, you can change those settings in the Speaker Settings menu. Save the measurement results first, then try to change the settings if you want.

Checking the Auto Calibration results

To check error code or warning message obtained in "2: Performing Auto Calibration" (page 44), proceed with the following steps.

Press ↑/↓ to select "Warning" in step 7 in "2: Performing Auto Calibration" (page 45) then press ⊕.

If a warning message appears, check the message and use the receiver without change. Or if necessary, perform Auto Calibration again.

When "Error Code" appears

Check the error and perform Auto Calibration again.

1 Press ⊕ to select "Enter".
"Retry?" appears on the TV screen.

2 Press ←/→ to select "Yes", then press ⊕.

3 Repeat steps 6 to 7 in "2: Performing Auto Calibration" (page 45).

To save measurement results that caused an error without taking a remedy

1 Press ↑/↓ repeatedly to select "Save" in step 7 in "2: Performing Auto Calibration" (page 45), then press ⊕.

2 Follow the steps in "3: Saving the measurement results" (page 46) to save the measurement results.

Message list after Auto Calibration measurement

Display and explanation

Error Code 31
The SPEAKERS is set to off. Set it to others and perform the Auto Calibration again.

Error Code 32
None of the speakers were detected. Make sure that the optimizer microphone is connected properly and perform the measurement again.
If the optimizer microphone is connected properly but the error code appears, the optimizer microphone cable may be damaged or improperly connected.

Error Code 33
• None of the front speakers are connected or only one front speaker is connected.
• The optimizer microphone is not connected.
• Either the surround left or surround right speaker is not connected.
• Surround back speakers or front high speakers are connected even though surround speakers are not connected. Connect the surround speaker(s) to the SPEAKERS SURROUND terminals.
• The surround back speaker is connected only to the SPEAKERS SURROUND BACK/FRONT HIGH/ BI-AMP/FRONT B R terminals. When you connect only one surround back speaker, connect it to the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B L terminals.
• Either the front left high or front right high speaker is not connected.

Warning 40
The measurement has completed. However, the noise level is high. You may be able to perform the measurement properly if you try it again, even though the measurement cannot be performed in all environments. Try to perform the measurement in a quiet environment.

Warning 41
Warning 42
The input from the microphone is too big.
• The distance between the speaker and the microphone may be too close. Set them apart and perform the measurement again.

Warning 43
The distance and position of a subwoofer cannot be detected. This may be caused by noise. Try to perform the measurement in a quiet environment.

No Warning
There is no warning information.

Tip
Depending on the position of the subwoofer, the measurement results for polarity may vary. However, there will be no problems even if you continue to use the receiver with that value.

Configuring the network settings of the receiver

The network settings for the receiver must be set correctly to use the network functions of the receiver.
You can make the required network settings for the receiver by following the instructions provided by an initial setup wizard.

The procedure used to set up the IP address automatically (DHCP) is explained below.
In this case, the router that is connected to the receiver or the Internet provider must support DHCP.
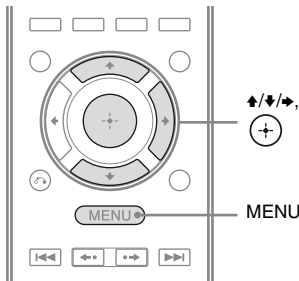
1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ✦/✦ repeatedly to select "🛋 Settings", then press ⊕ or ➡.

3 Press ✦/✦ repeatedly to select "Network", then press ⊕.

4 Press ✦/✦ repeatedly to select "Network Setup", then press ⊕.

"Start Network function Setup Wizard" appears on the TV screen.

5 Press ⊕ to select "Next".

6 Press ⊕ to select "Connect Automatically (DHCP)".

"Success! The receiver is now connected to network." appears on the TV screen when you have succeeded in making a connection.
If the failure screen is displayed, perform the process referring to "Network Setup" (page 118), after you have completed this process.

7 Press ⊕ to select "Finish".

To set the network settings manually

See "To set the IP address manually" (page 118) or "To set the Proxy server manually" (page 119).

Note
The wizard screen appears on the TV screen each time you use the network function, until the network function setup has been completed.

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Preparing a computer to use as a server

A server is a device which delivers content (music, photos, and videos) to a DLNA device on a home network.
You can play back content stored on a computer on a home network with this receiver via that network after you have installed application software* which has a DLNA compliant server function.

* If you use a Windows 7-based computer, use Windows Media Player 12 bundled with Windows 7.
If you use a Windows XP or Windows Vista-based computer, install the VAIO Media plus application software supplied with the receiver. See "What you can do with VAIO Media plus" below for details. In addition, refer to the help files of VAIO Media plus.

What you can do with VAIO Media plus

VAIO Media plus is an application software that enables you to quickly find content on your home network, such as music, photos, and videos, and view the content on the computer through the home network.
By connecting other devices to VAIO Media plus, you can also find and view the content on the connected devices through the home network. For example, you can enjoy photos and music, stored on your computer, on your TV and audio device or play a TV program, recorded with a hard disk recorder, on your computer.
If you use a VAIO computer, you can deliver content saved on an external hard disk drive or in Network-Attached Storage (NAS).

Note
If you use a computer other than a VAIO, you can only deliver content saved on the internal disk drive of that computer.

System Requirements

Operating System
Windows XP Home Edition/Professional/Media Center Edition 2004/Media Center Edition 2005 (SP3, 32 bit)
Windows Vista Home Basic/Home Premium/Business/Ultimate (SP1, 32 bit/64 bit)

Computer

	Windows XP	Windows Vista
Computer	IBM PC/AT compatible	
CPU	Intel Celeron M processor 1.40 GHz or higher (Intel Core 2 Duo 1.80 GHz or higher is recommended.)	Intel Core Duo 1.33 GHz or higher (Intel Core 2 Duo 2.26 GHz or higher is recommended.)
Memory	512 MB or more (1 GB or more is recommended.)	1 GB or more (2 GB or more is recommended.)
Graphic chip	Equipped with graphic chip by Intel, NVIDIA or ATI. DirectX 9.0c compatible video card (DirectX 9.0c/128 MB compatible video card and the latest driver are recommended.)	
Display	800 × 600 or higher resolution	
HDD	500 MB or more is recommended.	
Network	100Base-TX or higher	
Sound card	Direct Sound compatible sound card	

Note
Sony does not guarantee trouble-free operation on all computers that satisfy the system requirements. Other software operating on background may affect the operation of this software.

Installing the VAIO Media plus application software on a computer

When you use VAIO Media plus as server software, install on your computer the VAIO Media plus application software provided on the CD-ROM supplied with the receiver by following steps below.

If an older version of VAIO Media plus has already been installed on your computer, uninstall the following three programs using "Programs and Features" (for Windows Vista) or "Add or Remove Programs" (for Windows XP) in Control Panel beforehand.

- VAIO Media plus
- VAIO Content Folder Watcher
- VAIO Content Folder Setting

1 Turn on your computer and login as an administrator.

2 Insert the supplied CD-ROM into the CD-ROM drive of your computer.

The installation launcher starts automatically, then a Software Setup window appears on the screen. If installation launcher does not start automatically, double-click "SetupLauncher.exe" on the disc.

CD-ROM (VAIO Media plus application software) (supplied)
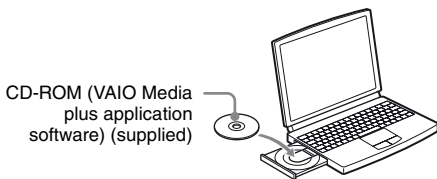
3 Install the VAIO Media plus application software following the instructions given in the message on the screen.

Referring to help files

For VAIO Media plus operations, refer to the help files.
Click "🧰 Settings" in the Home Menu window, then select " ❷ Help" to display help files.

Guide to on-screen display operation

You can display the menu of the receiver on the TV screen and select the function you want to use on the TV screen by pressing ↑/↓/←/→ and ⊕ on the remote.

To display the menu of the receiver on the TV screen, make sure that the receiver is in "GUI MODE" following the steps in "To turn "GUI MODE" on and off" (page 52).
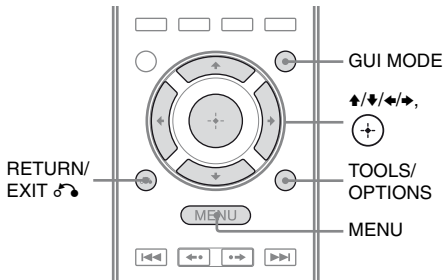
Using the menu

1 Switch the input of the TV so that an image of the menu is displayed.

2 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

3 Press ↑/↓ repeatedly to select a menu you want, then press ⊕ or → to enter the menu.

The menu item list appears on the TV screen.
Example: When you select "⊡ Input".
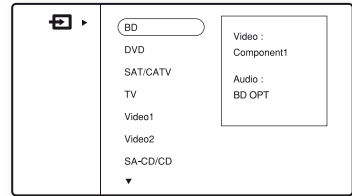
4 Press ↑/↓ repeatedly to select the menu item you want to adjust, then press ⊕ to enter the menu item.

5 Repeat steps 3 and 4 to select the parameter you want.

To return to the previous screen
Press RETURN/EXIT ↶.

To exit the menu
Press MENU.

To turn "GUI MODE" on and off
Press GUI MODE. "GUI ON" or "GUI OFF" appears on the display, depending on the mode selected.
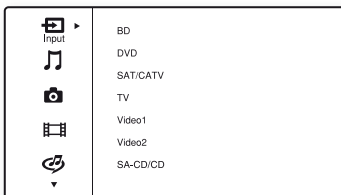
Overview of the main menus

Menu icon	Description
Input	Selects the input source component connected to the receiver (page 54).
Music	Selects the music from the server on the home network, "My Library" or the audio component connected to the DIGITAL MEDIA PORT adapter (page 56).
Photo	Selects the photos from the server on the home network or "My Library".
Video	Selects the images from the server on the home network, "My Library" or the audio component connected to the DIGITAL MEDIA PORT adapter (page 56).
Rhapsody	Selects the Rhapsody radio service (page 83). Rhapsody is only available in the U.S.
SHOUTcast	Selects the SHOUTcast radio service (page 86).
FM/AM/SR	Selects the built-in FM/AM radio or satellite tuner connected (page 61, 65).
Settings	You can adjust the settings of the speakers, the surround effect, equalizer, audio, video and other inputs connected to the HDMI jacks (page 107).

Using the option menus

When you press TOOLS/OPTIONS, the option menus for the selected main menu are displayed. You can select a related function without reselecting the menu.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

Input	BD
	DVD
	SAT/CATV
	TV
	Video1
	Video2
	SA-CD/CD

2 Press ⬆/⬇ repeatedly to select a menu you want, then press ⊕ or ➡ to enter the menu.
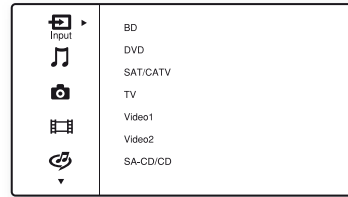
The menu item list appears on the TV screen.
Example: when you select " Input".

Input		
BD	Video :	Component1
DVD		
SAT/CATV	Audio :	BD OPT
TV		
Video1		
Video2		
SA-CD/CD		
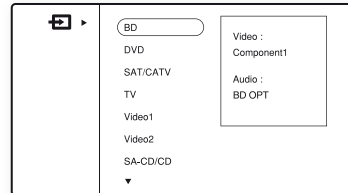
3 Press TOOLS/OPTIONS while the menu item list is displayed.

The option menu appears.

	BD	
	DVD	Input Assign
	SAT/CATV	Name Input
	TV	
	Video1	
	Video2	
	SA-CD/CD	
	▼	

4 Press ▲/▼ repeatedly to select the option menu item you want, then press ⊕ or ▶.

5 Press ▲/▼ repeatedly to select the parameter you want, then press ⊕.

To exit the option menu
Press MENU.
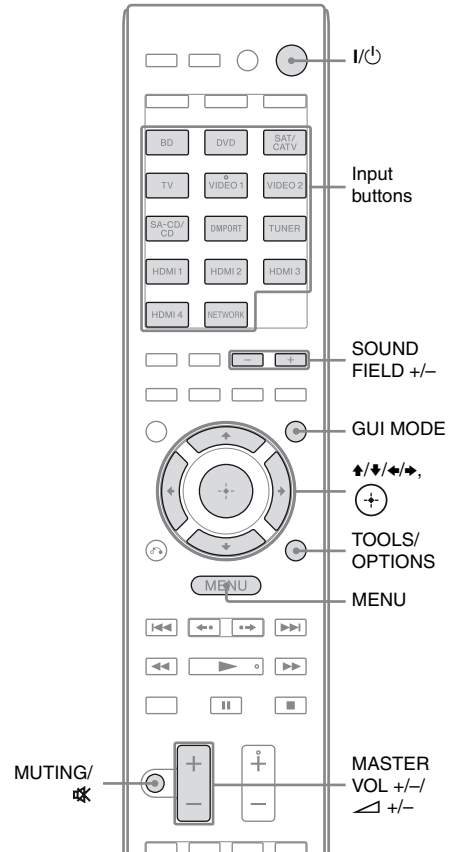
Playback

I/(¹)

Input buttons

SOUND FIELD +/−

GUI MODE

▲/▼/◀/▶, ⊕

TOOLS/ OPTIONS

MENU

MUTING/ 🔇

MASTER VOL +/−/ ∠ +/−

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ▲/▼ repeatedly to select " Input", then press ⊕ or ▶.

The menu item list appears on the TV screen.

3 Press ↑/↓ repeatedly to select the component you want, then press ⊕.

The menu screen disappears and the playback screen of the external input appears.

For details on the selected input and its connected components, see "Connections" (page 19).

4 Turn on the component and start playback.

5 Press MASTER VOL +/– (RM-AAP055 only) or ∠ +/– (RM-AAP056 only) to adjust the volume.

You can also use MASTER VOLUME on the receiver.

6 Press SOUND FIELD +/– to enjoy the surround sound.

You can also use 2CH/A.DIRECT, A.F.D., MOVIE or MUSIC button on the receiver.

For details, see page 73.

Tips
- You can press INPUT SELECTOR +/– on the receiver repeatedly or press input buttons on the remote to select the component you want.
- You can adjust the volume differently depending on the speed you turn the MASTER VOLUME on the receiver.

  To turn the volume up or down quickly: turn the knob quickly.

  To make fine adjustment: turn the knob slowly.
- You can adjust the volume differently depending on the length of time you press and hold the MASTER VOL +/– (RM-AAP055 only) or ∠ +/– (RM-AAP056 only) on the remote.

  To turn the volume up or down quickly: press and hold the button.

  To make a fine adjustment: press the button and release it immediately.

To activate the muting function

Press MUTING (RM-AAP055 only) or ⊠ (RM-AAP056 only) on the remote.

You can also use MUTING on the receiver. The muting function will be canceled when you do the following.
- Press MUTING (RM-AAP055 only) or ⊠ (RM-AAP056 only) again.
- Increase the volume.
- Turn off the receiver.
- Perform Auto Calibration.

To avoid damaging your speakers

Before you turn off the receiver, be sure to turn down the volume level.

Naming the input (Name Input)

You can enter a name of up to 8 characters for inputs and display it.

This is convenient for labeling the jacks with the names of the connected components.

1 Press ↑/↓ repeatedly on the "⊡ Input" screen to select the input you want.

2 Press TOOLS/OPTIONS.

The option menu appears.

3 Press ↑/↓ repeatedly to select "Name Input", then press ⊕.

4 Press ↑/↓ repeatedly to select a character, then press →.

You can move the input position backward and forward by pressing ←/→.

5 Repeat step 4 to input a character one by one, then press ⊕.

The name you entered is registered.

Enjoying sound/images from the components connected to the DIGITAL MEDIA PORT

The DIGITAL MEDIA PORT is for enjoying sound/images from a portable audio source or computer by connecting a DIGITAL MEDIA PORT adapter.

The DIGITAL MEDIA PORT adapters are available for purchase depending on the area. For details on connecting the DIGITAL MEDIA PORT adapter, see "4b: Connecting the audio components" (page 34).

You can use the following Sony DIGITAL MEDIA PORT adapters:
- TDM-BT1/BT10 Bluetooth™ Wireless Audio Adapter
- TDM-NW10 DIGITAL MEDIA PORT Adapter
- TDM-iP10/iP50 DIGITAL MEDIA PORT Adapter
- TDM-MP10 DIGITAL MEDIA PORT Adapter

The DIGITAL MEDIA PORT adapter is an optional product.

Notes
- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter to the DMPORT jack.
- Before disconnecting the DIGITAL MEDIA PORT adapter, be sure to turn off the receiver.
- Do not connect or disconnect the DIGITAL MEDIA PORT adapter while the receiver is turned on.
- Depending on the type of DIGITAL MEDIA PORT adapter, video output may not be possible.
- Do not connect a DIGITAL MEDIA PORT adapter that uses a network function such as TDM-NC1 Wireless Network Audio Client to the receiver. You can use the network function of the receiver without using a DIGITAL MEDIA PORT adapter.
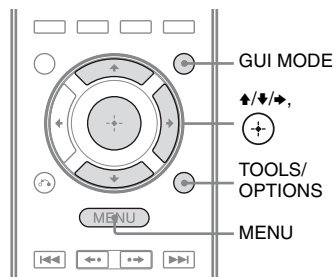
GUI MODE

$\uparrow/\downarrow/\rightarrow$,

$\oplus$

TOOLS/ OPTIONS

MENU

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press $\uparrow/\downarrow$ repeatedly to select "♫ Music" or "▤ Video", then press $\oplus$ or $\rightarrow$.

3 Press $\uparrow/\downarrow$ repeatedly to select "DMPORT" or a component connected to the DIGITAL MEDIA PORT adapter, then press $\oplus$.

The component connected to the DIGITAL MEDIA PORT adapter is recognized and "DMPORT" on the screen will change to the respective component's name.
If the connected adapter cannot be recognized, "DMPORT" is displayed on the TV screen.

Name	Component that is connected
DMPORT	A component other than one of the following is connected.
iPod	The iPod model recognized is connected.
Walkman	The Walkman recognized is connected.
Bluetooth	The Bluetooth drive recognized is connected.
Mobile Phone	The Mobile Phone recognized is connected.

4 **Select a track you want to play back using the component connected to the DIGITAL MEDIA PORT adapter.**

5 **Press MASTER VOL +/– (RM-AAP055 only) or ∠ +/– (RM-AAP056 only) to adjust the volume.**

You can also use MASTER VOLUME on the receiver.

Operating the TDM-iP50 using the GUI menu of the receiver

1 **Make sure that "System GUI" is selected in step 4 in "Changing the operation screen using the DIGITAL MEDIA PORT" (page 58).**

2 **Press ♦/♦ repeatedly to select " ♫ Music" or " ▤▥ Video", then press ⊕ or ➔.**

3 **Press ♦/♦ repeatedly to select the component connected to the DIGITAL MEDIA PORT adapter you want to play back, then press ⊕.**

The contents list appears.

4 **Select track or content from the contents list, then press ⊕.**

The following content lists are just examples. They may vary depending on the components connected to the receiver.

Music ── Playlists > Playlist > Track
     ── Artists > Artist > Album > Track
     ── Albums > Album > Track
     ── Songs > Track
     ── Genres > Genre > Artist > Album > Track
     ── Composers > Composer > Album > Track
     ── Audiobooks > Track

Video ── Movies > Content
     ── TV Shows > Episode > Content
     ── Music Videos > Artist > Content
     ── Video Podcasts > Episode > Content

5 **Press MASTER VOL +/– (RM-AAP055 only) or ∠ +/– (RM-AAP056 only) to adjust the volume.**

Selecting the playback mode

1 **Play back the track you want to listen to following the steps outlined in "Operating the TDM-iP50 using the GUI menu of the receiver" (page 57).**

2 **Press TOOLS/OPTIONS.**

The option menu appears.

3 **Press ♦/♦ repeatedly to select "Repeat", "Shuffle" or "Audiobook Speed", then press ⊕.**

4 **Press ♦/♦ repeatedly to select the mode you want, then press ⊕.**

■ Repeat

Plays back one or all the tracks
repeatedly.

- Off
  Deactivates the repeat play mode.
- One
  Plays back one track repeatedly.
- All
  Plays back all the tracks repeatedly.

■ Shuffle

Plays back all the tracks in random order.
- Off
  Deactivates the shuffle play mode.
- Songs
  Plays back all the tracks in "Songs" in
  random order.
- Albums
  Plays back all the tracks on an album in
  random order.

■ Audiobook Speed

Selects the display speed of the
Audiobook.
- Low
  Slows the display speed.
- Normal
  Sets the display speed to standard.
- High
  Increases the display speed.

DIGITAL MEDIA PORT message list

Message and explanation

No Adapter
The adapter is not connected.

No Device
There is no device connected to the adapter.

No Audio
No audio file was found.

Loading
The data is being read.

No Item
No item was found.

Changing the operation screen using the DIGITAL MEDIA PORT

You can change the operation screen using the
GUI menu. The DMPORT Control mode is
supported by the DIGITAL MEDIA PORT
adapters such as TDM-iP50. This mode is not
supported by other adapters.

1 **Select the DIGITAL MEDIA
PORT adapter you want on the
" Music" or " Video"
screen, then press ⊕ or ➡.**

2 **Press TOOLS/OPTIONS.**

The option menu appears.

3 **Press ⬆/⬇ repeatedly to select
"DMPORT Control", then press
⊕.**

If "DMPORT Control" is not displayed,
refer to the operating instructions
supplied with component for details on
operating that component.

4 **Press ⬆/⬇ repeatedly to select
the mode you want, then press
⊕.**

- System GUI
  The list of tracks will be displayed on
  the GUI screen of the receiver. You can
  select a track you want and play it back
  on each GUI screen.
- Adapter GUI
  The menu of the adapter will be
  displayed on the TV screen.
- iPod

To operate the TDM-iP50 using the adapter menu

Make sure that "Adapter GUI" is selected in step 4 in "Changing the operation screen using the DIGITAL MEDIA PORT" (page 58).
For details on operating the adapter using the adapter GUI menu, refer to the operating instructions supplied with the adapter you are using.

To operate the TDM-iP50 using the iPod menu

Make sure that "iPod" is selected in step 4 in "Changing the operation screen using the DIGITAL MEDIA PORT" (page 58).
For details on operating the iPod, refer to the operating instructions supplied with the iPod.

Using the Sleep Timer

You can set the receiver to turn off automatically at a specified time.

AMP
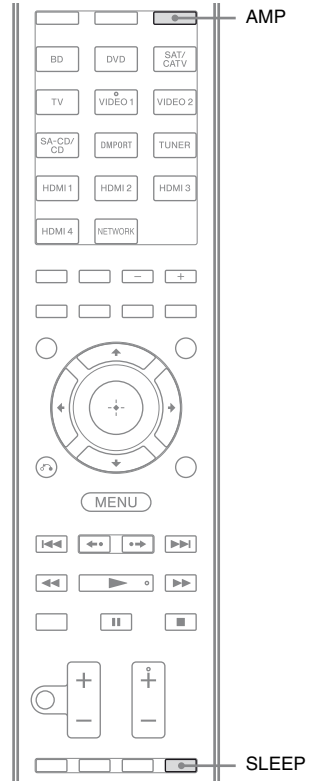
SLEEP

Press AMP, then press SLEEP repeatedly while the power is on.

"SLEEP" lights up on the display.
Each time you press SLEEP, the display changes cyclically as follows:

0:30:00 → 1:00:00 → 1:30:00 → 2:00:00 → OFF

Tip

To check the remaining time before the receiver turns off, press SLEEP. The remaining time appears on the display. If you press SLEEP again, the Sleep Timer will be canceled.

Recording using the receiver

You can record from a video/audio component using the receiver. Refer to the operating instructions supplied with your recording component.

Input buttons

GUI MODE

↑/↓/←/→,
(+)

MENU
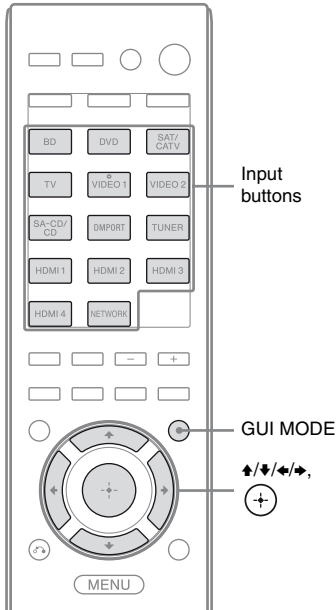
Recording onto a CD-R

You can record onto a CD-R using the receiver. Refer to the operating instructions supplied with your CD recorder.

1 Press one of the input buttons to select the playback component.

You can also use INPUT SELECTOR +/– on the receiver.

2 Prepare the playback component for playing.

For example, tune to the radio station you want to record (page 61).

3 Prepare the recording component.

Insert a blank CD-R into the CD recorder and adjust the recording level.

4 Start recording on the recording component, then start playback on the playback component.

Note

Sound adjustments do not affect the signal output from the SA-CD/CD/CD-R AUDIO OUT jacks.

Recording with a video component

1 Press one of the input buttons to select the playback component.

You can also use INPUT SELECTOR +/– on the receiver.

2 Prepare the playback component for playing.

For example, insert the video tape you want to copy into the VCR.

3 Prepare the recording component.

Insert a blank video tape, etc. into the recording component (connected to VIDEO 1 OUT jacks) for recording.

4 Start recording on the recording component, then start playback on the playback component.

Notes
- Some sources contain copy guards to prevent recording. In this case, you may not be able to record from the source.
- Only analog input signals are output from the analog output jack (for recording).
- HDMI sound cannot be recorded.
- While only composite video signals are being recorded, the auto standby function of the receiver may start up and interrupt the recording. In this case, set "Auto Standby" to "OFF" (page 121).

Listening to FM/AM radio

You can listen to FM and AM broadcasts through the built-in tuner. Before operation, be sure you have connected the FM and AM antennas (aerials) to the receiver (page 35).

Tip
The tuning scale for direct tuning is shown below.

Area	FM	AM
USA	100 kHz	10 kHz*
Europe	50 kHz	9 kHz

* The AM tuning scale can be changed (page 63).

SHIFT

Numeric buttons

GUI MODE

▲/▼/→,
⊕

TOOLS/
OPTIONS
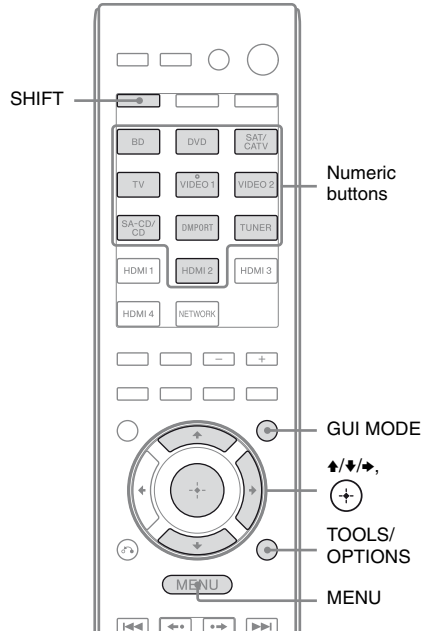
MENU

Tuning into a station automatically (Auto Tuning)

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ♦/♦ repeatedly to select "⏪ FM" or "⏪ AM", then press ⊕ or ➡.

The FM or AM menu list appears on the TV screen.

3 Press ♦/♦ repeatedly to select "Auto Tuning", then press ⊕.

4 Press ♦/♦.

Press ♦ to scan from low to high, press ♦ to scan from high to low.
The receiver stops scanning whenever a station is received.

In case of poor FM stereo reception

1 Tune in the station you want to listen to using Auto Tuning, Direct Tuning (page 62), or select the preset station you want (page 63).
2 Press TOOLS/OPTIONS.
3 Press ♦/♦ repeatedly to select "FM Mode", then press ⊕ or ➡.
4 Press ♦/♦ repeatedly to select "Mono", then press ⊕.

Tuning into a station directly (Direct Tuning)

You can enter the frequency of a station directly by using the numeric buttons.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ♦/♦ repeatedly to select "⏪ FM" or "⏪ AM", then press ⊕ or ➡.

The FM or AM menu list appears on the TV screen.

3 Press ♦/♦ repeatedly to select "Direct Tuning", then press ⊕.

4 Press SHIFT, then press numeric buttons to enter the frequency.

Example 1: FM 102.50 MHz
Select 1 ➡ 0 ➡ 2 ➡ 5 (➡ 0*)
Example 2: AM 1,350 kHz
Select 1 ➡ 3 ➡ 5 ➡ 0

*Press 0 for European model only.

Tip
If you have tuned in an AM station, adjust the direction of the AM loop antenna (aerial) for optimum reception.

5 Press ⊕.

If you cannot tune in a station

"– – – . – – MHz" appears and then the screen returns to the current frequency.
Make sure you have entered the right frequency. If not, repeat step 4. If you still cannot tune in a station, the frequency is not used in your area.

Changing the AM tuning scale

(USA model only)

You can change the AM tuning scale to either 9 kHz or 10 kHz using the buttons on the receiver.

I/(¹)
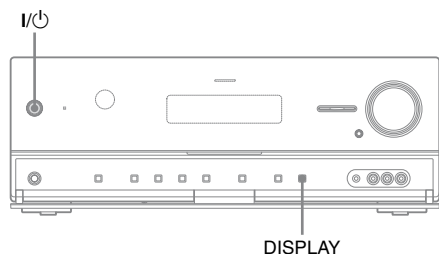
DISPLAY

1 **Press I/(¹) to turn off the receiver.**

2 **While holding down DISPLAY, press I/(¹) on the receiver.**

3 **Change the current AM tuning scale to 9 kHz (or 10 kHz).**

To reset the scale to 10 kHz (or 9 kHz), repeat the procedure above.

Note

All preset stations will be erased when you change the tuning scale.

Presetting FM/AM radio stations

(Preset Tuning)

You can preset up to 30 FM and 30 AM stations. Then you can easily tune in the stations you often listen to.

▲/▼/◄/►,
(+)
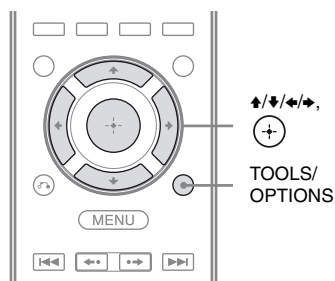
TOOLS/
OPTIONS

1 **Tune in the station that you want to preset using Auto Tuning (page 62) or Direct Tuning (page 62).**

In case of poor FM stereo reception, switch the FM reception mode (page 62).

2 **Press TOOLS/OPTIONS.**

The option menu appears.

3 **Press ▲/▼ repeatedly to select "Memory", then press (+) or ►.**

4 **Press ▲/▼ repeatedly to select a preset number, then press (+).**

The station is stored as the selected preset number.

5 **Repeat steps 1 to 4 to preset another station.**

You can store station as follows:
• AM band: AM 1 to AM 30
• FM band: FM 1 to FM 30

Tuning to preset stations

1 **Select "◙ FM" or "◙ AM" from the menu, then press ⊕ or ➡.**

2 **Press ✦/✦ repeatedly to select the preset station you want.**

Preset numbers from 1 to 30 are available.

Naming preset stations (Name Input)

1 **On "◙ FM" or "◙ AM" screen, press ✦/✦ repeatedly to select the preset number on which you have stored the station and which you want to name.**

2 **Press TOOLS/OPTIONS.**

The option menu appears.

3 **Press ✦/✦ repeatedly to select "Name Input", then press ⊕ or ➡.**

4 **Press ✦/✦ repeatedly to select a character, then press ➡.**

You can move the input position backward and forward by pressing ◄/➡.

5 **Repeat step 4 to input a character one by one, then press ⊕.**

The name you entered is registered.

Receiving RDS broadcasts

(European model only)

This receiver allows you to use Radio Data System (RDS), which enables radio stations to send additional information along with the regular program signal. This receiver offers convenient RDS features, such as Program Service name display. RDS is available only for FM stations.*

* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS services in your area, check with your local radio stations for details.

Simply select a station on the FM band using Direct Tuning (page 62), Auto Tuning (page 62), or Preset Tuning (page 63).

When you tune in a station that provides RDS services, "RDS" lights up and the Program Service name* appears on the TV screen and the display.

* If an RDS broadcast is not received, a Program Service name will not appear on the display.

Notes
• RDS may not work properly if the station you tuned to is not transmitting the RDS signal properly or if the signal strength is weak.
• Some letters that can be displayed on the TV screen cannot be displayed on the display.

Tip
When a Program Service name is displayed, you can check the frequency by pressing DISPLAY repeatedly (page 127).

Listening to Satellite Radio

(USA model only)

To listen to Satellite Radio, you'll need to connect a SIRIUS Satellite Radio tuner (sold separately) to your Sirius-Ready receiver. SIRIUS Satellite Radio is available to residents of the US (except Alaska and Hawaii) and Canada.

Satellite Radio delivers a variety of commercial-free music from categories ranging from Pop, Rock, Country, R&B, Dance, Jazz, Classical and many more plus coverage of all the top professional and college sports including play by play games from select leagues and teams. Additional programming includes expert sports talk, uncensored entertainment, comedy, family programming, local traffic and weather and news from your most trusted sources.

Once you've purchased a SIRIUS tuner you'll need to activate it and subscribe to begin enjoying the service. Easy to follow installation and setup instructions are provided with the SIRIUS tuner. There are a variety of programming packages available, including the option of adding "The Best of XM" programming to the SIRIUS service. The "Best of XM" service is not available to SIRIUS Canada subscribers at this time. Please check with SIRIUS Canada for any updates using the numbers and web address below.

Family friendly packages are also available to restrict channels featuring content that may be inappropriate for children.

To subscribe to SIRIUS, U.S. and Canadian customers can call 1-888-539-SIRI (1-888-539-7474) or visit sirius.com (US) or siriuscanada.ca (Canada).

SIRIUS and all related marks and logos are trademarks of Sirius XM Radio Inc. and its subsidiaries. All other marks and logos are the property of their respective owners. All rights reserved. SIRIUS subscription sold separately. Taxes and a one-time activation fee may apply. SIRIUS tuner required (sold separately) to receive the SIRIUS service. All programming and fees subject to change. It is prohibited to copy, decompile, disassemble, reverse engineer, hack, manipulate or otherwise make available any technology or software incorporated in receivers compatible with the SIRIUS Satellite Radio System. **Service not available in Alaska or Hawaii.**

Tuner Operations

Connecting a satellite radio tuner

Connect the SiriusConnect Home tuner. When you use the SiriusConnect Home tuner with this receiver, be sure to connect the AC power adaptor supplied with the tuner to a wall outlet.

SIRIUS jack
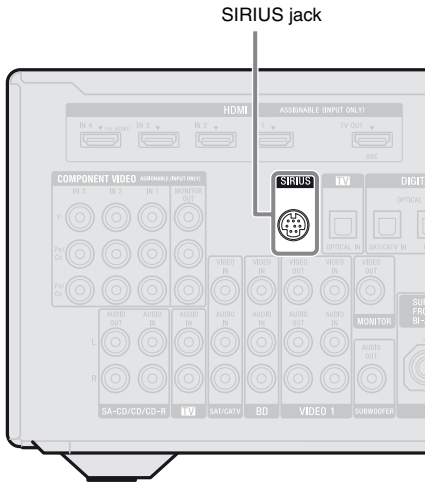
Note

Keep the SiriusConnect Home tuner, antenna, and AC power adaptor away from the speaker cords and the power cord to avoid picking up noise.

Preparing to listen to a satellite radio
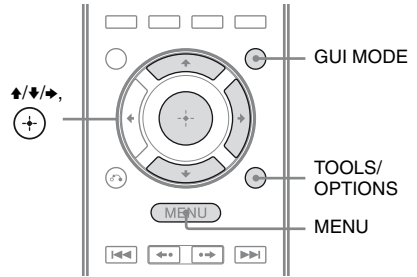
Checking the ID number

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ♦/♦ repeatedly to select "⛃ SR", then press ⊕ or ♦.

3 Press ♦/♦ repeatedly to select "ALL", then press ⊕.

When the "Preset Mode" screen is displayed, change the tuning mode to "Category Mode", then select "ALL". Press TOOLS/OPTIONS, then select "Category Mode".

4 Press ♦/♦ repeatedly to select "Sirius ID", then press ⊕.

5 Check the SIRIUS ID on the TV screen and write it in the space provided here.

SIRIUS ID:_____

You can also check the SIRIUS ID using the display on the receiver.

Checking receiving conditions (Antenna Aiming)

1 Select "⏣ SR" from the menu, then press ⊕ or ➔.

2 Press TOOLS/OPTIONS.

The option menu appears.

3 Press ⬆/⬇ repeatedly to select "Antenna Aiming", then press ⊕.

4 While checking the quality of the reception, adjust the direction of the antenna to obtain the best reception.

To exit the menu

Press MENU.

Selecting a channel of the satellite radio

SHIFT

Numeric buttons

⬆/⬇/➔, ⊕

GUI MODE

TOOLS/ OPTIONS

MENU

Tuner Operations
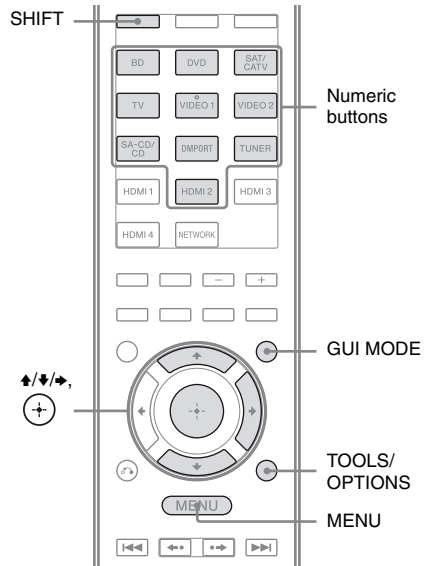
Selecting a channel by category (Category Mode)

You can select a channel from one category or all the categories.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ⬆/⬇ repeatedly to select "⏣ SR", then press ⊕ or ➔.

3 Press ✦/✦ repeatedly to select the category, then press ⊕.

- ALL: You can select a channel from all the categories.
- (category name): You can select a channel from one category.

Note

When the "Preset Mode" screen is displayed, press TOOLS/OPTIONS, then press ✦/✦ repeatedly to select "Category Mode".

4 Press ✦/✦ repeatedly to select the channel, then press ⊕.

The selected channel is being received. The channel information is displayed on the TV screen.

Note

When you select a channel in the "Category Mode", the channel you selected may not be the one in the category you want. This is because one channel may belong to more than one category.

Selecting a channel by inputting the channel number directly (Direct Tuning)

You can enter the channel number directly by using the numeric buttons.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ✦/✦ repeatedly to select "🖼 SR", then press ⊕ or ➡.

3 Press TOOLS/OPTIONS.

The option menu appears.

4 Press ✦/✦ repeatedly to select "Direct Tuning", then press ⊕.

5 Press SHIFT, then press the numeric buttons to enter the channel number.

6 Press ⊕.

The selected channel is tuned in.

Presetting satellite radio channels

You can select the channels you want directly by presetting them using the preset numbers. You can preset up to 30 SIRIUS Satellite Radio channels.
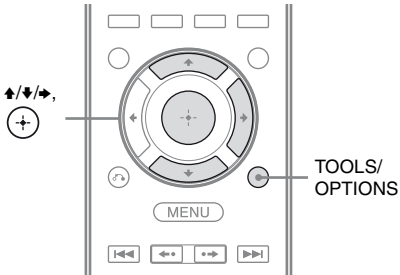
1 Select a channel you want to preset using Category Mode (page 67) or Direct Tuning (page 68).

2 Press TOOLS/OPTIONS.

The option menu appears.

3 Press ♦/♦ repeatedly to select "Memory", then press ⊕.

The preset number selection screen appears.

4 Press ♦/♦ repeatedly to select the preset number you want to use as the preset channel, then press ⊕.

Preset channels from 1 to 30 are available, and a default channel is preset for all the preset channels when you purchase the receiver.

The selected channel is registered as the preset channel you selected in step 1.

5 Repeat steps 1 to 4 to preset another channel.

Selecting preset channels

1 Select "⏸ SR" from the menu, then press ⊕ or ➡.

2 Press ♦/♦ repeatedly to select the preset number from the preset list, then press ⊕.

You can select stored preset channels from 1 to 30.

Notes

• The channel information you have preset may be changed if Sirius XM Radio Inc. change its channel programming.
• When the "Category Mode" screen is displayed, press TOOLS/OPTIONS, then press ♦/♦ repeatedly to select "Preset Mode".

Restricting access to specific channels

(Parental Lock)

You can restrict access to certain channels using your own lock code. The lock code is set to "0000" as the default.
Change the lock code before you use this function for the first time. See "To change the lock code (Lock Code)" (page 70).

SHIFT

Numeric buttons

▲/▼/▶,
(+)

RETURN/
EXIT
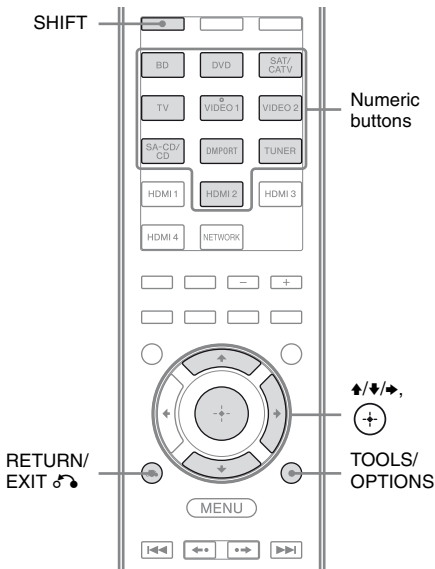
TOOLS/
OPTIONS

MENU

1 Select a channel you want to lock using Category Mode (page 67) or Direct Tuning (page 68).

2 Press TOOLS/OPTIONS.

The option menu appears.

3 Press ▲/▼ repeatedly to select "Parental Lock", then press (+) or ▶.

4 Press ▲/▼ repeatedly to select "ON", then press (+).

"Enter your 4-digit lock code." appears.

5 Press SHIFT, then press the numeric buttons to enter your 4-digit lock code.

"The channel has been locked." appears and the Parental Lock is set.
To delete the numbers you have entered, go back to step 2 by pressing RETURN/
EXIT ⤺, and then repeat the procedure above from step 2.

To change the lock code (Lock Code)

1 Select a channel you want to change the lock code using Category Mode (page 67) or Direct Tuning (page 68).

2 Press TOOLS/OPTIONS.
The option menu appears.

3 Press ▲/▼ repeatedly to select "Lock Code", then press (+).
"Enter your 4-digit lock code." appears.

4 Press SHIFT, then press the numeric buttons to enter your 4-digit lock code.
"Enter a new lock code." appears.

5 Enter a new 4-digit lock code using the numeric buttons.
"To confirm, enter your new lock code again." appears.

6 Reenter the new lock code with the numeric buttons.
"The lock code has been changed." appears.

To listen to the locked channels

1 Select a locked channel you want to listen to using Direct Tuning (page 68).
"Enter your 4-digit lock code." appears.

2 Press SHIFT, then press the numeric buttons to enter your 4-digit lock code.
The channel is tuned in.

To cancel the Parental Lock

1 Select a channel you want to unlock using Direct Tuning (page 68).

2 Press TOOLS/OPTIONS.
The option menu appears.

3 Press ▲/▼ repeatedly to select "Parental Lock", then press ⊕ or ➜.

4 Press ▲/▼ repeatedly to select "OFF", then press ⊕.
"Enter your 4-digit lock code." appears.

5 Press SHIFT, then press the numeric buttons to enter your 4-digit lock code.
"The channel has been unlocked." appears and the channel is unlocked.

Notes
- When you select a channel using Category Mode, locked channels are skipped.
- When the receiver is reset to the initial settings, the lock code returns to the default (0000), but the Parental Lock settings are not removed.
- You cannot preset locked channels. If you set the Parental Lock for a preset channel, the preset information for that channel returns to the default.
- You cannot set the Parental Lock for channel 0 and channel 184.
- You can set only one lock code on the receiver. You cannot set individual lock codes for each channel.

Satellite radio message list

Message appears on TV screen [Display]	Explanation	Remedies
Antenna Error [ANTENNA ERROR]	The antenna is not connected properly.	Check the connection between the SiriusConnect Home tuner and the antenna.
Acquiring Signal [ACQUIRING]	The receiving condition is not good.	Try moving the antenna to another location. For details about the antenna location, refer to the operating instructions supplied with the SiriusConnect Home tuner.
Call 888-539-SIRI [CALL 888-539-SIRI]	You have not subscribed for the selected channel.	—
Check Sirius Tuner [SR TUNER]	The SiriusConnect Home tuner is not connected properly.	Check all the connections, and then turn the system on again. Also make sure if the AC adaptor supplied with the SiriusConnect Home tuner is connected to a wall socket.
Invalid Channel [INVALID CHANNEL]	You have entered an invalid channel number.	The channel to be tuned-in is void due to the change by the broadcast service, or the receiving condition is not good.
Locked Channel [LOCKED CH]	The selected channel is locked.	—
Sub Updated [SUB UPDT]	The subscription information has been updated.	—
Updating [UPDATING]	Channel information is being updated.	—
FW Updating [FW UPDT]	The SiriusConnect Home tuner firmware is being updated.	—
––––	There is no text information in the channel.	This is not an error. The text information may not be displayed depending on the system condition, for example, right after the system has received a channel.

Selecting the sound field

This receiver can create multi channel surround sound. You can select one of the optimized sound fields from the receiver's preprogrammed sound fields.
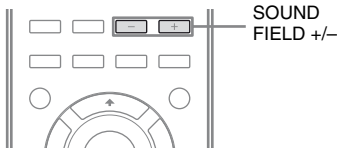
SOUND
FIELD +/–

Press SOUND FIELD +/– repeatedly to select the sound field you want.

You can also use 2CH/A.DIRECT, A.F.D., MOVIE or MUSIC on the receiver.

2 channel sound mode

You can switch the output sound to 2 channel sound regardless of the recording formats of the software you are using, the playback component connected, or the sound field settings of the receiver.

■ 2CH ST. (2ch Stereo)

The receiver outputs the sound from the front left/right speakers only. There is no sound from the subwoofer.
Standard 2 channel stereo sources completely bypass the sound field processing and multi channel surround formats are downmixed to 2 channel.

■ A. DIRECT (2ch Analog Direct)

You can switch the audio of the selected input to 2 channel analog input. This function enables you to enjoy high quality analog sources.
When using this function, only the volume and front speaker level can be adjusted.

Note
You cannot select "A. DIRECT" in the following cases.
– When you play back content on devices on a home network.
– When you select DVD and HDMI 1- 4 as input.

Auto Format Direct (A.F.D.) mode

The Auto Format Direct (A.F.D.) mode allows you to listen to high fidelity sound and select the decoding mode for listening to a 2 channel stereo sound as multi channel sound.

■ A.F.D. AUTO (A.F.D. Auto)

Presets the sound as it was recorded/encoded without adding any surround effects.

■ MULTI ST. (A.F.D. Multi Stereo)

Outputs 2 channel left/right signals from all speakers.

Movie mode

You can take advantage of surround sound simply by selecting one of the receiver's pre-programmed sound fields. They bring the exciting and powerful sound of movie theaters into your home.

■ C.ST.EX A (Cinema Studio EX A D C S)

Reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio. This is a standard mode, great for watching almost any type of movie.

■ C.ST.EX B (Cinema Studio EX B D C S)

Reproduces the sound characteristics of the Sony Pictures Entertainment "Kim Novak Theater" cinema production studio. This mode is ideal for watching science-fiction or action movies with lots of sound effects.

■ C.ST.EX C (Cinema Studio EX C D C S)

Reproduces the sound characteristics of the Sony Pictures Entertainment scoring stage. This mode is ideal for watching musicals or films where orchestra music is featured in the soundtrack.

■ V.MULTI DIM. (V.Multi Dimension D C S)

Creates many virtual speakers from a single pair of actual surround speakers.

■ PLII Movie

Performs Dolby Pro Logic II Movie mode decoding. This setting is ideal for movies encoded in Dolby Surround. In addition, this mode can reproduce sound in 5.1 channel for watching videos of overdubbed or old movies.

■ PLIIx Movie

Performs Dolby Pro Logic IIx Movie mode decoding. This setting expands Dolby Pro Logic II Movie or Dolby Digital 5.1 to discrete 7.1 movie channels.

■ PLIIz (PLIIz Height)

Performs Dolby Pro Logic IIz mode decoding. This setting increases flexibility to expand a 5.1 to a 7.1 channel system. Its vertical component gives a dimension of presence and depth.

■ Neo:6 CIN (Neo:6 Cinema)

Performs DTS Neo:6 Cinema mode decoding. A source recorded in 2 channel format is decoded into 7 channels.

Music mode

You can take advantage of surround sound simply by selecting one of the receiver's preprogrammed sound fields. They bring the exciting and powerful sound of concert halls into your home.

■ HALL (Hall)

Reproduces the acoustics of a classical concert hall.

■ JAZZ (Jazz Club)

Reproduces the acoustics of a jazz club.

■ CONCERT (Live Concert)

Reproduces the acoustics of a 300-seat live house.

■ STADIUM (Stadium)

Reproduces the feeling of a large open-air stadium.

■ SPORTS (Sports)

Reproduces the feeling of sports broadcasting.

■ PORTABLE (Portable Audio)

Reproduces a clear enhanced sound image from your portable audio device. This mode is ideal for MP3 and other compressed music.

■ PLII Music

Perform Dolby Pro Logic II Music mode decoding. This setting is ideal for normal stereo sources such as CDs.

■ PLIIx Music

Performs Dolby Pro Logic IIx Music mode decoding. This setting is ideal for normal stereo sources such as CDs.

■ PLIIz (PLIIz Height)

Performs Dolby Pro Logic IIz mode decoding. This setting increases flexibility to expand a 5.1 to a 7.1 channel system. Its vertical component gives a dimension of presence and depth.

■ Neo:6 MUS (Neo:6 Music)

Performs DTS Neo:6 Music mode decoding. A source recorded in 2 channel format is decoded into 7 channels. This setting is ideal for normal stereo sources such as CDs.

When headphones are connected

You can only select this sound field if the headphones are connected to the receiver.

■ HP 2CH (Headphone (2ch))

This mode is selected automatically if you use headphones (except "A. DIRECT"). Standard 2 channel stereo sources completely bypass the sound field processing and multi channel surround formats are downmixed to 2 channels except LFE signals.

Note

When headphones are connected to the S-AIR surround amplifier, the sound field is automatically set to "HP 2CH".

■ HP DIRECT (Headphone (Direct))

This mode is selected automatically if you use headphones when "A. DIRECT" is selected. Outputs the analog signals without processing by the equalizer, sound field, etc.

Notes on sound fields

- Depending on the speaker pattern settings, some sound fields may not be available.
- You cannot select PLIIx and PLIIz at the same time.
  - PLIIx is available only when the speaker pattern is set to a setting with surround back speaker(s).
  - PLIIz is available only when the speaker pattern is set to a setting with front high speakers.
- The sound fields for music and movie do not work in the following cases.
  - Signals with a sampling frequency of more than 48 kHz are being received.
  - Signals with more than 5.1 channel are being received (except PLIIz).
- "PLII movie", "PLIIx Movie", "PLII Music", "PLIIx Music", "PLIIz", "Neo:6 CIN" and "Neo:6 MUS" also do not work when the speaker pattern is set to 2/0 or 2/0.1.

- When one of the sound fields for music is selected, no sound is output from the subwoofer if all the speakers are set to "Large" in the Speaker Settings menu. However, the sound will be output from the subwoofer if
  - the digital input signal contains LFE signals.
  - the front or surround speakers are set to "Small".
  - the sound field for movie is selected.
  - "PORTABLE" is selected.
- The effects provided by the virtual speakers may cause increased noise in the playback signal.
- When listening with sound fields that employ the virtual speakers, you will not be able to hear any sound coming directly from the surround speakers.
- If you set up the sound field during DTS 96/24 signal reception, the signal will be played back only at 48 kHz.
- If there is any noise present, the noise may be different depending on the sound field you select.

Tips

- You can identify the encoding format of DVD software, etc., by looking at the logo on the package.
- Dolby Pro Logic IIx and Dolby Pro Logic IIz decoding are effective when multi channel signals are input.
- Sound fields with **D C S** marks use DCS technology.

To turn off the surround effect for movie/music

Press SOUND FIELD +/– repeatedly to select "2CH ST." or "A.F.D. AUTO".
You can also press 2CH/A.DIRECT repeatedly on the receiver to select "2CH ST." or press A.F.D. repeatedly on the receiver to select "A.F.D. AUTO".

Digital audio formats supported by the receiver

Digital audio formats that this receiver can decode depend on digital audio input jacks for the components connected. This receiver supports the following audio formats.

Audio format	Maximum number of channels	Connection of the playback component and the receiver	
		COAXIAL/OPTICAL	HDMI
Dolby Digital	5.1	○	○
Dolby Digital EX	6.1	○	○
Dolby Digital Plus[a]	7.1	×	○
Dolby TrueHD[a]	7.1	×	○
DTS	5.1	○	○
DTS-ES	6.1	○	○
DTS 96/24	5.1	○	○
DTS-HD High Resolution Audio[a]	7.1	×	○
DTS-HD Master Audio[a][b]	7.1	×	○
Multi channel Linear PCM[a]	7.1	×	○

[a] Audio signals are output in another format if the playback component does not correspond to the format. For details, refer to the operating instructions of the playback component.
[b] Signals with a sampling frequency of more than 96 kHz are played back at 96 kHz or 88.2 kHz.

Enjoying the surround effect at low volume levels
(NIGHT MODE)

This function allows you to retain a theater like environment at low volume levels. This function can be used with other sound fields. When watching a movie late at night, you will be able to hear the dialog clearly even at a low volume level.
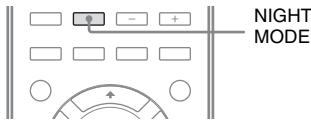
NIGHT MODE

Press NIGHT MODE to select "NIGHT ON".

The NIGHT MODE function is activated. The NIGHT MODE is set to on and off as you press NIGHT MODE.

Note

This function does not work in the following cases.
– "A. DIRECT" is being used.
– Signals with a sampling frequency of more than 48 kHz are being received.

Tip

While this function is on, the Bass, Treble, and Effect Levels increase, and "D.Range Comp" is automatically set to "MAX".

Resetting sound fields to the initial settings

Be sure to use the buttons on the receiver for this operation.

I/(¹)
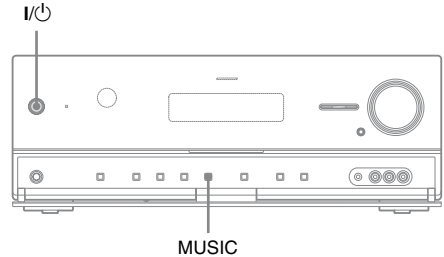
MUSIC

1 Press I/(¹) to turn off the receiver.

2 While holding down MUSIC, press I/(¹).

"S.F. CLEAR" appears on the display and all sound fields are reset to their initial setting.

About the network functions of the receiver

- You can enjoy content (music, photos, and videos) which have been stored on a DLNA-compliant device (DLNA CERTIFIED™ Products) that has an authorized DLNA logo displayed on the device (page 78).
- You can use the receiver as a device equivalent to a UPnP media renderer on your home network.
- With an Internet connection, you can listen to Rhapsody and SHOUTcast (page 83, 86) and upgrade the software of the receiver. Rhapsody is only available in the U.S.
- You can change the settings of the receiver using a computer on your home network (page 88).

About DLNA

DLNA (Digital Living Network Alliance) is a standard organization made up of manufacturers of various products, such as computers, AV components, and mobile computing devices which exchange content (music, photos, and videos). DLNA decides upon standards and publishes an authorized logo to be displayed on devices which support DLNA standards.

Enjoying content stored on the server

A server is a device which delivers content (music, photos, and videos) to a DLNA device on a home network.
You can play back music, photos, and videos stored on the server using the receiver.
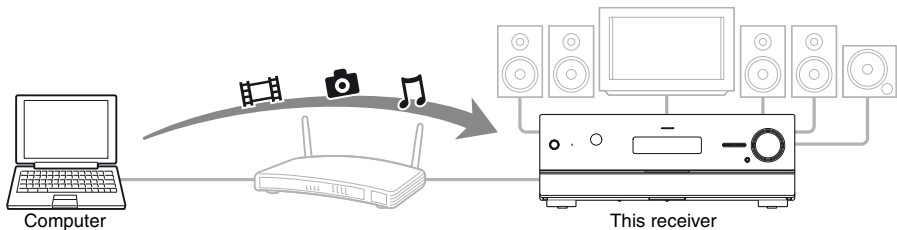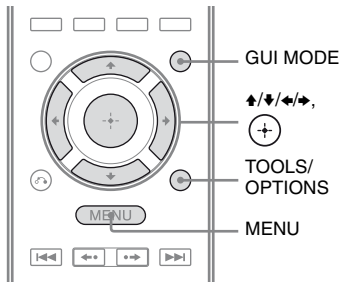
Computer   This receiver

GUI MODE

$\blacklozenge/\blacklozenge/\blacklozenge/\blacklozenge$,
$\oplus$

TOOLS/
OPTIONS

MENU

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.

Press MENU if the GUI menu does not appear on the TV screen.

2 Press $\blacklozenge/\blacklozenge$ repeatedly to select "♫ Music", "📷 Photo", or "🎞 Video", then press $\oplus$ or ➡.

3 Press $\blacklozenge/\blacklozenge$ repeatedly to select "Server", then press $\oplus$.

The server list appears on the TV screen.

4 Press $\blacklozenge/\blacklozenge$ and $\oplus$ to select the server which holds the content you want to play back.

The content list appears on the TV screen.

5 Press $\blacklozenge/\blacklozenge/\blacklozenge/\blacklozenge$ repeatedly to select content you want to play back from the content list, then press $\oplus$.

The playback screen appears on the TV screen, and content you selected is played back.

To search the server

You can search the server if the server list does not appear on the TV screen.

1 Select "♫ Music", "📷 Photo", or "🎞 Video" from the menu, then press $\oplus$ or ➡.

2 Press $\blacklozenge/\blacklozenge$ repeatedly to select "Server", then press $\oplus$.

3 Press TOOLS/OPTIONS.

4 Press $\blacklozenge/\blacklozenge$ repeatedly to select "Server Search", then press $\oplus$.

The confirmating message appears.

5 Select "Yes", then press $\oplus$.

The updated server list appears.

Registering your favorite content

You can register your favorite content played back from "♫ Music", "📷 Photo", or "🎞 Video" in "My Library".

1 Press TOOLS/OPTIONS while playing back the content.

2 Press $\blacklozenge/\blacklozenge/\blacklozenge/\blacklozenge$ repeatedly to select "Add track (picture, movie) to My Library", then press $\oplus$.

3 Select the number you want to use to register the content from the list, then press $\oplus$.

The content you chose will be registered in "My Library".

Using Network Features

Playing back content registered in My Library

1 Select "♪ Music", "📷 Photo", or "🎞 Video" from the menu, then press ⊕ or ➡.

2 Press ⬆/⬇ repeatedly to select "My Library", then press ⊕.

3 Press ⬆/⬇ repeatedly to select content you want to play back from the content list.

The playback screen appears on the TV screen and content you selected is played back.

Note

You cannot register content played back from "My Library" in "My Library".

Using the remote to play back content

You can enjoy content on the server by using the following buttons on the remote.
Press AMP to operate the receiver using the remote.

Type of content	♪ Music	📷 Photo	🎞 Video
Remote button ▶	●	●	●
■	●	●	●
❚❚	●	●**	●
▶▶❙	●	●**	
❙◀◀	●	●**	
▶▶	●*		●*
◀◀	●*		●*

* This button may not work depending on the connected server or the content type.
**This button is available when photos are played back in the slideshow mode or from "My Library".

Selecting the playback mode

You can select the playback mode of the Music category.

1 Press TOOLS/OPTIONS while the music selections are displayed on the list*, or while listening to the music.

* TOOLS/OPTIONS may not work, depending on the type of content.

2 Press ⬆/⬇ repeatedly to select "Repeat" or "Shuffle", then press ⊕.

3 Press ⬆/⬇ repeatedly to select the mode you want, then press ⊕.

■ Repeat

Plays back one or all the tracks repeatedly.
- Off
  Deactivates the repeat play mode.
- One
  Plays back one track repeatedly.
- All
  Plays back all the tracks repeatedly.

■ Shuffle

Plays back all the tracks in random order.
- Off
  Deactivates the shuffle play mode.
- On
  Activates the shuffle play mode.

To play back a photo together with background music (BGM)

You can enjoy photos with music registered in "My Library" as background music.

1 Play back a photo from "Server" (page 78) or "My Library" (page 80).
If you play back a photo from "Server", you can play back a single photo or a slideshow of photos listed on the screen. If you select a photo from "My Library", photos in "My Library" will be played back in sequence in the slideshow mode.

2 Press TOOLS/OPTIONS.

3 Press ♦/♦ repeatedly to select "BGM", then press ⊕.

4 Press ♦/♦ repeatedly to select the mode you want, then press ⊕.
• Off
Stops playback of background music.
• On
Plays back all the tracks in "My Library" repeatedly.
• On (Shuffle)
Plays back all the tracks in "My Library" repeatedly in random order.

Using a controller

You can do the following using a device which has a control function on the home network.
– Playing back content stored on the server with the receiver.
– Operating the receiver using Windows 7 based computer with Windows Media Player 12.

Note
Before you operate the receiver using a controller, you have to set the controller you want to use to match the receiver. Set "External Control" to "ON", then set "Controllers" in the Network Settings menu. For details on settings for controllers, see "Controllers" (page 119).

Enjoying content stored on the server

You can enjoy or check the status of content (music, photos and videos) on the server using a controller.

The following operation are supported.
• Playback, stop, pause, fast forward and fast backward of content
• Go to the next/previous content item
• Check the elapsed time of the currently playing content

Notes
• Some operation may not be performed, depending on the device used as a controller, the content type, or the server. For details, refer to the operating instructions of each device.
• If you operate the receiver using the supplied remote together with a controller, the receiver may not work properly.

Computer
(server, controller)

This receiver
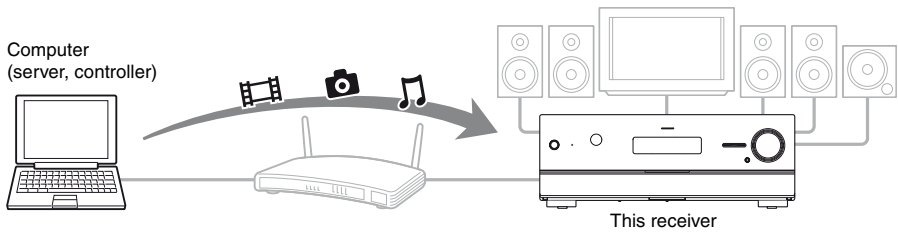
1 **Select the device to be used as a server using a controller on the home network.**

2 **Select the content you want to play back using a controller on the home network.**

3 **Select the receiver to be used to play back the content using a controller on the home network.**

Refer to the operating instructions of each device.

Listening to Rhapsody

(USA model only)

You can enjoy the Rhapsody Digital Music Service by connecting your receiver to the Internet.
Rhapsody is only available in the U.S.

Rhapsody Digital Music Service

Play all the music you want with Rhapsody®

Thousands of artists. Millions of songs. Rhapsody is the critically-acclaimed digital music service that gives you unlimited access to a massive music catalog of millions of songs and thousands of artists. You'll also get exclusive content, personalized recommendations, DJ/ad-free listening on "Rhapsody Radio" and more.

For more information go to:
www.rhapsody.com/sonystr

GUI MODE

▲/▼/◄/►,
⊕

TOOLS/
OPTIONS

MENU
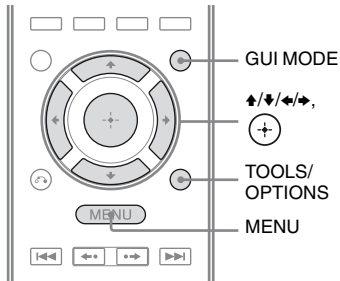
Setting an account

Before using the Rhapsody Digital Music Service, it is necessary to register an account using your computer.
Refer to www.rhapsody.com/sonystr for details.
Sign in using your account on the receiver.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ▲/▼ repeatedly to select "🧰 Settings", then press ⊕ or ►.

3 Press ▲/▼ repeatedly to select "Network", then press ⊕.

4 Press ▲/▼ repeatedly to select "Rhapsody Account", then press ⊕.

The confirmation screen for account input appears on the TV screen.

5 Press ◄/► repeatedly to select "Yes", then press ⊕.

The account input screen appears on the TV screen.

6 Press ▲/▼ repeatedly to select the Username box, then press ⊕.

The soft keyboard appears on the TV screen.

7 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter your username.

8 Press ▲/▼/◄/► repeatedly to select "Finish", then press ⊕.

9 Press ▲/▼ repeatedly to select the Password box, then press ⊕.

10 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter your password.

Using Network Features

11 Press ↑/↓/←/→ repeatedly to select "Finish", then press ⊕.

12 Press ↑/↓ repeatedly to select "Finish", then press ⊕.

Note

Repeat the process again from step 6 if the sign in fails.

To check the account information

1 Select "🧰 Settings" from the menu, then press ⊕ or →.

2 Press ↑/↓ repeatedly to select "Network", then press ⊕.

3 Press ↑/↓ repeatedly to select "Rhapsody Account", then press ⊕.

4 Press TOOLS/OPTIONS.

5 Press ↑/↓ repeatedly to select "Account Information", then press ⊕.
The account type and the customer support ID appear on the TV screen.

To delete an account

1 Select "🧰 Settings" from the menu, then press ⊕ or →.

2 Press ↑/↓ repeatedly to select "Network", then press ⊕.

3 Press ↑/↓ repeatedly to select "Rhapsody Account", then press ⊕.

4 Press TOOLS/OPTIONS to select "Remove Account", then press ⊕.

5 Press ←/→ repeatedly to select "Yes", then press ⊕.
The username and password are deleted.

Selecting the station from the Rhapsody Stations list

You can select the station you want to listen using the Rhapsody Stations list.

1 Select "🎵 Rhapsody" from the menu, then press ⊕ or →.

2 Press ↑/↓ repeatedly to select "Rhapsody Radio", then press ⊕ or →.

3 Press ↑/↓/←/→ repeatedly to select the station you want to listen to, then press ⊕.

The reception screen appears on the TV screen and the station you selected is received.

Selecting the track using Music Guide

The Music Guide displays a variety of music selections to sample, including top tracks and artists, and recommendations.
Select genre names, charts, and new releases anywhere in the Music Guide pages to browse more.

1 Select "🎵 Rhapsody" from the menu, then press ⊕ or →.

2 Press ↑/↓ repeatedly to select "Rhapsody Music Guide", then press ⊕ or →.

3 Press ↑/↓ repeatedly to select "Genres", "Charts", "New Releases", or "Rhapsody Recommends", then press ⊕.

4 Press ▲/▼/◄/► to select the track you want to listen to from the list, then press ⊕.

The playback screen appears on the TV screen and the track you selected is played back.

Searching for a track, album, or artist you want to listen to

You can search for a track, album, or artist using the search function.

1 Select " ⊘ Rhapsody" from the menu, then press ⊕ or ►.

2 Press ▲/▼ repeatedly to select "Search", then press ⊕ or ►.

3 Press ▲/▼ repeatedly to select "Artists", "Albums", or "Tracks" you want to search for, then press ⊕.

The soft keyboard appears on the TV screen.

4 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter the title or name you want to search for.

5 Press ▲/▼/◄/► to select "Finish", then press ⊕.

Wait until the search result is displayed.

6 Press ► to select the search results.

7 Press ▲/▼/◄/► repeatedly to select the track you want to listen to from the search result, then press ⊕.

The playback screen appears on the TV screen, and track you selected is played back.

Registering your favorite track, album, or station

You can register your favorite track, album, or station in "My Library" while playing back the track or during reception.
You can select the track, album or station that you registered in "My Library" from "My Artists", "My Albums", "My Genres", "My Tracks", "My Playlists", or "My Stations".

1 Press TOOLS/OPTIONS while a track is playing back or you are selecting a station.

2 Press ▲/▼ repeatedly to select "Add track to My Library", "Add album to My Library", or "Add station to My Library", then press ⊕.

The track, album, or station you chose will be registered in "My Library".

To remove a track, album, or station registered in My Library

You can remove a track, album, or station you registered in "My Library".

1 Press TOOLS/OPTIONS while a track is playing back or you are selecting a station.

2 Press ▲/▼ repeatedly to select "Delete album from My Library", "Delete track from My Library", or "Delete station from My Library", then press ⊕.
The confirmation screen of deletion appears on the TV screen.

3 Press ◄/► repeatedly to select "Yes", then press ⊕.
The deletion is completed.

Selecting a track, playlist or station registered in My Library

You can select a track, playlist or station registered in "My Library".

1 Select " 🎵 Rhapsody" from the menu, then press ⊕ or ➡.

2 Press ✦/✦ repeatedly to select "My Library", then press ⊕.

3 Press ✦/✦/◄/➡ to select the track you want to listen to using My Library list, then press ⊕.

My Library list

― **My Artists** > *Artist(s)** > *Albums(s)** > *Track(s)**

― **My Albums** > *Album(s)** > *Track(s)**

― **My Genres** > *Genre(s)** > *Artist(s)** > *Album(s)** > *Track(s)**

― **My Tracks** > *Track(s)**

― **My Playlists** > *Playlist(s)** > *Track(s)**

└─ **My Stations** > *Station(s)**

*The number of lists displayed on the screen depends on the status of the Rhapsody Digital Music Service you are using.

The playback screen appears on the TV screen and the track you selected is played back.

Listening to SHOUTcast

SHOUTcast is a digital audio streaming technology-based radio service.
SHOUTcast is a directory of internet radio stations, allowing users to access thousands of free online radio stations from DJs and broadcasters around the world.
Refer to http://www.shoutcast.com for details.
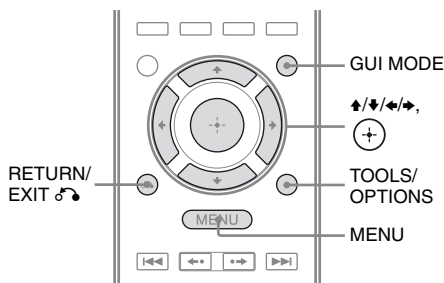
Selecting a SHOUTcast station

1 **Press GUI MODE.**

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ✦/✦ repeatedly to select " 📡 SHOUTcast", then press ⊕ or ➡.

3 Press ✦/✦ repeatedly to select "Preset List", "0-9", or A to Z, then press ⊕.

4 Press ✦/✦ repeatedly to select the genre you want to listen to, then press ⊕.

5 Press ⬆/⬇/⬅/➡ to select the station you want to listen to, then press ⊕.

The reception screen appears on the TV screen, and the station you selected is received.

Notes
- When the number of stations is large, up to 100 stations can be displayed (in order) on this receiver.
- The audio supplied in a format that is not supported by this receiver does not appear on the list.

Presetting favorite stations

You can register your favorite SHOUTcast stations on the receiver.

1 Press TOOLS/OPTIONS while listening to the radio station.

2 Press ⊕ to select "Add to Preset List".

The preset number list appears on the TV screen.

3 Press ⬆/⬇ repeatedly to select the preset number you want to preset, then press ⊕.

Note
If you select a list number for which a station has already been registered, the previously registered station will be overwritten.

To return to the previous screen
Press RETURN/EXIT ⌒.

Selecting preset stations

You can select your favorite stations from among the stations you registered.

1 Select " ⚡ SHOUTcast" from the menu, then press ⊕ or ➡.

2 Press ⬆/⬇ repeatedly to select "Preset List", then press ⊕.

3 Press ⬆/⬇ repeatedly to select the preset number station you want to listen to, then press ⊕.

The reception screen appears on the TV screen, and the station you selected is received.

Using Network Features

Features of the Setup Manager application software

You can check the settings of the receiver, and adjust those settings using your computer, as well as using the receiver, after installing the Setup Manager application software provided on the CD-ROM supplied with the receiver.

The following settings cannot be set using the computer with the Setup Manager application software.

- Auto Calibration
- Speaker
  – Test Tone
- S-AIR

System Requirements

Operating System

Windows 7 Starter/Home Premium/
Professional/Ultimate (32bit/64bit)
Windows Vista Home Basic/Home Premium/
Business/Ultimate (SP2, 32bit/64bit)
Windows XP Home Edition/Professional
(SP3, 32bit)

Computer

CPU: Celeron, Pentium III or higher
Clock Speed: 1 GHz or higher
RAM: 512 MB or more
HDD: 20 MB or more free disk space
(280 MB free disk space is required when
.NET Framework 2.0 is not installed.)
Monitor: 1024 × 768, High Color
(65536 colors)
Network: 100Base-TX or higher

Installing the Setup Manager application software on a computer

1 **Turn on your computer and login as an administrator.**

2 **Insert the supplied CD-ROM into the CD-ROM drive of your computer.**

The installation launcher starts automatically, then a Software Setup screen appears on the screen.
If the installation launcher does not start automatically, double-click "SetupLauncher.exe" on the disc.

CD-ROM (Setup Manager application software) (supplied)
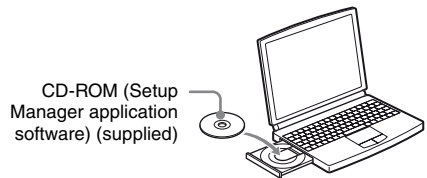
3 **Install the Setup Manager application software following the instructions given in the message on the screen.**

Updating the receiver software using the Setup Manager

You can update the receiver software using the Setup Manager application software provided on the CD-ROM supplied with the receiver. Refer to the HELP of the Setup Manager for details on operations of the Setup Manager. Before updating the receiver software, set "UPDATE(PC)" from "DENY" to "PERMIT" using the display of the receiver so that the receiver software can be updated using a computer (page 127).

1 **Download the update program from the support website on the computer to which you installed the Setup Manager.**

2 **Click "System" in the Setup Manager window on the computer screen, then click "Browse..." and specify the path of the update program, and click "Start Update".**

The MULTI CHANNEL DECODING indicator on the front panel flashes while updating.
When updating complete, the receiver will restart automatically.

Notes
• Do not turn the receiver off or disconnect the network cable during software updating. It may cause a malfunction.
• It may take 50 minutes for the software updating to complete.

To check the HELP

When you want to check the HELP of the Setup Manager application software, click [Start] – [All Programs] – [Setup Manager] – [Help for Setup Manager], in that order.

What is "BRAVIA" Sync?

"BRAVIA" Sync is compatible with Sony TV, Blu-ray Disc/DVD player, AV amplifier, etc., that is equipped with the Control for HDMI function.
By connecting Sony components that are compatible with the "BRAVIA" Sync with an HDMI cable (not supplied), operation is simplified as follows:
• One-Touch Play (page 91)
• System Audio Control (page 92)
• System Power-Off (page 93)
• Theater/Theatre Mode Sync (page 93)

Control for HDMI is a mutual control function standard used by HDMI CEC (Consumer Electronics Control) for HDMI (High-Definition Multimedia Interface).

We recommend that you connect the receiver to products featuring "BRAVIA" Sync.

Note
Depending on the connected component, the Control for HDMI function may not work. Refer to the operating instructions of the component.

Preparing for the "BRAVIA" Sync

The receiver is compatible with the "Control for HDMI-Easy Setting" function.
- If your TV is compatible with the "Control for HDMI-Easy Setting" function, you can set the Control for HDMI function of the receiver and playback components automatically by setting the TV (page 90).
- If your TV is not compatible with the "Control for HDMI-Easy Setting" function, set the Control for HDMI function of the receiver, playback components and TV individually (page 90).

If your TV is compatible with the "Control for HDMI-Easy Setting" function

The Control for HDMI function of the receiver can be turned on simultaneously by turning on the Control for HDMI function of the TV.

1 Connect the receiver, TV and playback components via HDMI connection (page 25).
(The respective components must be compatible with the Control for HDMI function.)

2 Turn on the receiver, TV and playback components.

3 Turn on the Control for HDMI function of the TV.
The Control for HDMI function of the receiver and all the connected components are turned on simultaneously. When the setup is completed, "COMPLETE" will appear.

For details on setup of the TV, refer to the operating instructions of your TV.

If your TV is not compatible with the "Control for HDMI-Easy Setting" function

GUI MODE

↑/↓/→,
⊕
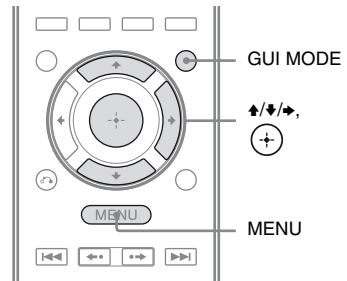
MENU

1 Perform the steps given in "If your TV is compatible with the "Control for HDMI-Easy Setting" function" (page 90).

2 Press GUI MODE.
After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

3 Press ↑/↓ repeatedly to select "🖿 Settings", then press ⊕ or →.
The Settings menu list appears on the TV screen.

4 Press ↑/↓ repeatedly to select "HDMI", then press ⊕.

5 Press ↑/↓ repeatedly to select "Control for HDMI", then press ⊕ or →.

6 Press ↑/↓ repeatedly to select "ON", then press ⊕.
The Control for HDMI function is set to on.

7 Press GUI MODE to exit the GUI menu.
If the GUI menu is displayed, the Control for HDMI function of the playback components will not work properly.

8 Set the Control for HDMI function of the connected component to on.
If the Control for HDMI function for the connected component is already set to on, you do not need to change the setting.
For details on setting the TV and connected components, refer to the operating instructions of the respective components.

Notes

• Before you do the "Control for HDMI-Easy Setting" from the TV, be sure to turn on the TV, connected components and receiver.
• If the playback components cannot function after you have made the settings for "Control for HDMI-Easy Setting", check the Control for HDMI setting on your TV.
• If the connected components do not support "Control for HDMI-Easy Setting", you need to set the Control for HDMI function for the connected components to on before you perform the "Control for HDMI-Easy Setting" from the TV.
• When you assign the component video input to the HDMI input using the Input Assign function, you cannot set "Control for HDMI" to "ON".

Playing back components with one-touch operation
(One-Touch Play)

By a simple operation (one-touch), components connected to the receiver with HDMI connections start automatically. You can enjoy the sound/image using connected components.
When you set "Pass Through" to "AUTO" or "ON", sound and image can be output only from the TV while the receiver remains in standby mode.

When you start playback a connected component, the receiver and TV operation are simplified as follow:

Receiver and TV

Turns on (if in standby mode)

↓

Switches to appropriate HDMI input
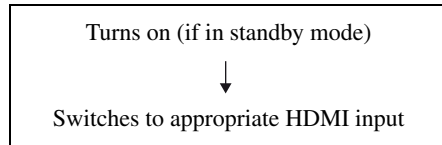
Notes

• Depending on the TV, the start of the content may not be output.
• Depending on the settings, the receiver may not turns on when "Pass Through" is set to "AUTO" or "ON".

Tip

You can also select a connected component, such as DVD/Blu-ray Disc player using the TV menu. The receiver and TV will automatically switch to the appropriate HDMI input.

"BRAVIA" Sync Features

Enjoying the TV sound from the speakers connected to the receiver
(System Audio Control)

You can enjoy the TV sound from the speakers connected to the receiver by a simple operation.
You can operate System Audio Control function using the TV menu. For details, refer to the operating instructions of the TV.

TV	Receiver
Sets System Audio Control to on	• Turns on (if in standby mode) • Switches to appropriate HDMI input
Minimizes TV volume	Outputs TV sound
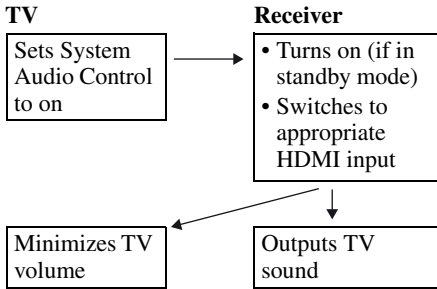
You can also use the System Audio Control function as follows.

• If you turn on the receiver while the TV is turned on, the System Audio Control function will automatically be set to on and the TV sound will output from the speakers connected to the receiver. However, if you turn off the receiver, the sound will output from the TV speakers.
• When you adjust the TV volume, the receiver's volume is adjusted simultaneously.

Notes

• If System Audio Control does not function according to your TV setting, refer to the operating instructions of the TV.
• When "Control for HDMI" is set to "ON", the "Audio Out" settings in the HDMI Settings menu will set automatically depending on the System Audio Control settings.
• When you connect a TV that does not have System Audio Control function, the System Audio Control function does not work.
• If the TV is turned on before turning on the receiver, the TV sound will not be output for a moment.

Turning off the receiver with the TV

(System Power-Off)

When you turn the TV off by using the POWER button on the TV's remote, the receiver and the connected components turn off automatically.

You can also use the receiver's remote to turn off the TV.

AV I/(I)

TV

BD   DVD   SAT/CATV
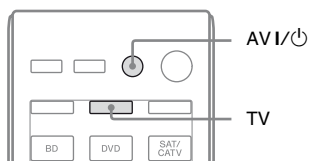
Press TV, then press AV I/(I).

The TV, receiver and the components connected via HDMI are turned off.

Notes

• Set the TV Standby Synchro to "ON" before using the System Power-Off function. For details, refer to the operating instructions of the TV.

• Depending on the status, the connected components may not be turned off. For details, refer to the operating instructions of the connected components.

Enjoying movies with the optimum sound field

(Theater/Theatre Mode Sync)

THEATER/
THEATRE

BD   DVD   SAT/CATV
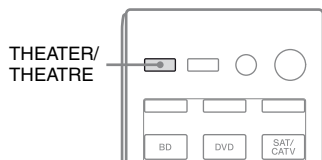
Press THEATER or THEATRE on the remote of the receiver, TV, or the Blu-ray Disc player, while pointing the remote towards the TV.

The sound field switches to "C.ST.EX B". To return to the previous sound field, press THEATER or THEATRE again.

Note

The sound field may not switch depending on the TV.

Tip

The sound field may be changed back to the previous one when you change the TV's input.

"BRAVIA" Sync Features

S-AIR Operations

About S-AIR products

This receiver is compatible with the S-AIR function, which allows wireless sound transmission between S-AIR products. There are two types of S-AIR product.

- S-AIR main unit (this receiver):
  The S-AIR main unit is for transmitting sound.
  You can use up to 3 S-AIR main units. (The number of usable S-AIR main unit depends on the use environment.)
- S-AIR sub unit (not supplied):
  The S-AIR sub unit is for receiving sound.
  – Surround amplifier: You can enjoy surround and surround back speakers sound wirelessly. For details, refer to the operating instructions supplied with the surround amplifier.
  – S-AIR receiver: You can enjoy system sound in another room.

These S-AIR products can be purchased as an option (the S-AIR product lineup differs depending on the area).

See the notes or instructions for the S-AIR sub unit in this manual only when the S-AIR sub unit is used.

Notes

- The S-AIR menu and parameters only available when you have inserted the wireless transmitter.
- When the speaker pattern is set to a setting with front high speakers, the surround back speakers sound is not output from surround amplifier even if the surround amplifier is connected.

Room B — S-AIR sub unit (S-AIR receiver)

Room A — S-AIR main unit (this receiver)

S-AIR sub unit (surround amplifier)
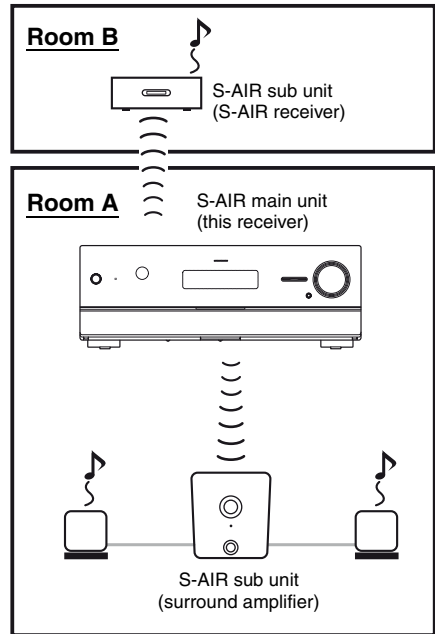
About environments where S-AIR products (S-AIR main unit and sub unit) are used

S-AIR products use a radio frequency of 2.4 GHz. Certain electronic equipment or other factors may cause lost connection or instability in S-AIR reception.

- Electronic equipment influence
  The following may cause interference or cross talk.
  – Cellular phones, cordless phones
  – Wireless LAN, personal computers
  – Game machines using radio signals
  – Microwave ovens

- Other factors
  The following may cause poor reception.
  – Materials or structures, such as walls and floors
  – The location where an S-AIR product is placed

When using S-AIR products, place them as far as possible from the above electronic equipment, or place where S-AIR reception is stable.

Setting up an S-AIR product

Before using an S-AIR product, be sure to perform the following settings to establish the sound transmission.
- Inserting the wireless transmitter/transceiver (page 36).
- Establishing sound transmission between the S-AIR main unit and S-AIR sub unit (ID setting) (page 95).
- Pairing the S-AIR main unit with a specific S-AIR sub unit (Pairing operation) (page 96).
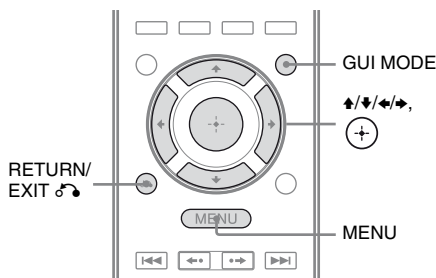
Establishing sound transmission between the S-AIR main unit and S-AIR sub unit (ID setting)

When you match the ID of the S-AIR main unit and the S-AIR sub unit, you can establish sound transmission. You can use multiple S-AIR main unit by setting a different ID for each unit.

To set the ID of the S-AIR main unit

1 Press GUI MODE.
  After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
  Press MENU if the GUI menu does not appear on the TV screen.

S-AIR Operations

2 Press ▲/▼ repeatedly to select
"⚙ Settings", then press ⊕ or ➡.
The Settings menu list appears on the TV
screen.

3 Press ▲/▼ repeatedly to select "S-AIR",
then press ⊕.

4 Press ▲/▼ repeatedly to select "S-AIR
ID", then press ⊕ or ➡.

5 Press ▲/▼ repeatedly to select the ID
(A, B or C) you want, then press ⊕.
The ID of the S-AIR main unit is set. "Set
S-AIR ID of the sub unit to the same as that
of the main unit." appears.

6 Press ⊕.

7 Press GUI MODE.
The GUI menu turns off.

Tip
To check the current ID, select "S-AIR" in the
Settings menu list. When you pair the S-AIR main
unit with the S-AIR sub unit (page 96), "(Pairing)"
appears beside the ID on the TV screen in the GUI
menu.

To set the ID of the S-AIR sub unit

Be sure to match the ID on S-AIR sub unit you
want to the S-AIR main unit.
For details on setting the ID of the surround
amplifier and S-AIR receiver, refer to the
operating instructions supplied with the
surround amplifier and S-AIR receiver.

**Sound transmission is established as follows
(example):**
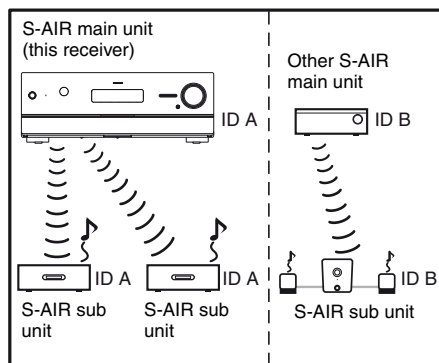
Notes
• Sources with copyright protection may not be
  playable on S-AIR sub unit.
• If you have connected surround amplifier,
  surround sound will not be output from S-AIR
  main unit.

Tip
You can use multiple S-AIR main units by setting a
different ID for each component.

Pairing the S-AIR main unit with a specific S-AIR sub unit (Pairing operation)

To establish sound transmission, you need to
set the same ID for your S-AIR main unit and
S-AIR sub unit.
However, if your neighbors have S-AIR
products and their IDs are the same as yours,
your neighbors could receive the sound of
your S-AIR main unit or vice versa.
To prevent this, you can pair the S-AIR main
unit with a specific S-AIR sub unit by
performing the pairing operation.

◾ Before pairing

Sound transmission is established by the ID (example).

Your room | **Neighbor**

S-AIR main unit
(this receiver)

ID A

ID A
S-AIR sub unit

ID A
S-AIR sub unit
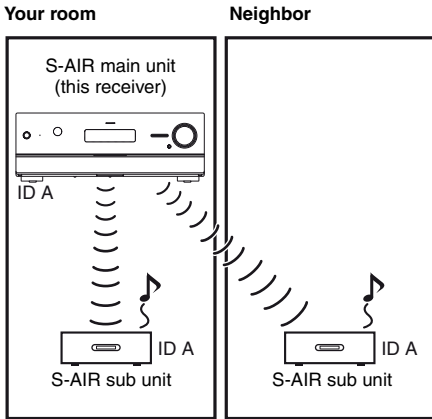
◾ After pairing

Sound transmission is established between the paired S-AIR main unit and S-AIR sub unit(s) only.

Your room | **Neighbor**

S-AIR main unit
(this receiver)

No transmission

ID A
S-AIR sub unit

ID A
S-AIR sub unit
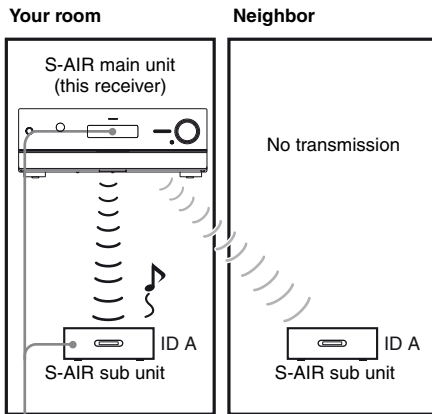
Pairing

1 Place the S-AIR sub unit that you want to pair near the S-AIR main unit.

2 Match the IDs of the S-AIR main unit and the S-AIR sub unit.

- To set the ID of the S-AIR main unit, see "To set the ID of the S-AIR main unit" (page 95).
- To set the ID of the S-AIR sub unit, refer to the operating instructions supplied with the S-AIR sub unit.

3 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.

Press MENU if the GUI menu does not appear on the TV screen.

4 Press ✦/✦ repeatedly to select "🎒 Settings", then press (+) or ➡.

The Settings menu list appears on the TV screen.

5 Press ✦/✦ repeatedly to select "S-AIR", then press (+).

6 Press ✦/✦ repeatedly to select "Pairing", then press (+) or ➡.

"Put the S-AIR sub unit near the S-AIR main unit, and turn on power. Start pairing." appears on the TV screen. The S-AIR main unit is ready to start pairing.

7 Press ◄/➡ repeatedly to select "Yes", then press (+).

The S-AIR main unit starts pairing. "Pairing. Do the pairing operation with the S-AIR sub unit." appears.

8 Start pairing of the S-AIR sub unit.

Refer to the operating instructions of the S-AIR sub unit.

S-AIR Operations

9 Press ◄/► repeatedly to select "Finish" or "Continue", then press ⊕.

• "Finish": Finishes pairing.
• "Continue": Continues to perform
  pairing to another S-AIR sub unit.

Tip

You can confirm the pairing completion or the
current ID by checking the "S-AIR Settings"
screen. "(Pairing)" appears beside the current
S-AIR ID.

10 Press GUI MODE.

The GUI menu turns off.

Note

After you have performed pairing, if you select the
"S-AIR ID" menu, the ID setting ("A", "B" or "C")
that you last used is displayed.

If pairing fails

"Pairing failed. Retry?" appears.
To perform pairing again, select "Yes".
To finish pairing, select "No".

To quit pairing during setting

Press RETURN/EXIT ♂.

To cancel pairing

Perform the ID setting of the main unit
according to the procedure of "To set the ID of
the S-AIR main unit" (page 95). If you reset
the ID (even the same ID again), pairing is
canceled.

Enjoying the system's sound in another room

(For the S-AIR receiver only (not supplied))

You can enjoy the system's sound in another
room by using the S-AIR receiver. The S-AIR
receiver can be placed in another room for
enjoying the system's sound there.
For details of the S-AIR receiver, refer to the
operating instructions supplied with the S-AIR
receiver.

GUI MODE

▲/▼/►,
⊕

MENU
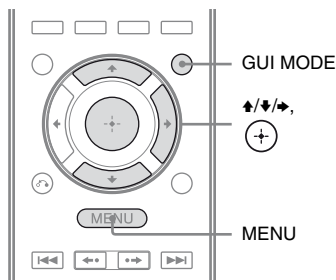
1 Set the ID of the S-AIR receiver to match the ID of the S-AIR main unit.

• To set the ID of the S-AIR main unit,
  see "To set the ID of the S-AIR main
  unit" (page 95).
• To set the ID of the S-AIR receiver,
  refer to the operating instructions
  supplied with the S-AIR receiver.

Notes
• When you are using another S-AIR sub unit,
  such as a surround amplifier, do not change
  the ID of the S-AIR main unit. Set the ID of
  the S-AIR receiver to match the ID of the
  S-AIR main unit.
• When you pair the S-AIR main unit and
  another S-AIR sub unit, such as a surround
  amplifier, you also need to pair the S-AIR
  main unit and the S-AIR receiver. For details,
  see "Pairing the S-AIR main unit with a
  specific S-AIR sub unit (Pairing operation)"
  (page 96).

2 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

3 Press ♦/♦ repeatedly to select "🧰 Settings", then press ⊕ or ➡.

The Settings menu list appears on the TV screen.

4 Press ♦/♦ repeatedly to select "S-AIR", then press ⊕.

5 Press ♦/♦ repeatedly to select "S-AIR Mode", then press ⊕ or ➡.

6 Press ♦/♦ repeatedly to select the setting you want, then press ⊕.

- PARTY: The S-AIR receiver outputs sound according to the input selected on the S-AIR main unit.
- SEPARATE: You can select the input you want for the S-AIR receiver while the input of the S-AIR main unit remain unchanged. When "SEPARATE" is selected, you can only select "SA-CD/CD", "DMPORT", "FM TUNER", "AM TUNER", "SIRIUS"*, "SERVER", "Rhapsody"*, "SHOUTcast" and the input that is currently selected on the S-AIR main unit.
  * USA model only.

Note
When the input selected on the S-AIR receiver is same as S-AIR main unit, the input of the S-AIR receiver will change according to the S-AIR main unit.

7 Press GUI MODE.

The GUI menu turns off.

8 Select the input you want on the S-AIR receiver.

■ When "PARTY" is set
The S-AIR receiver's function changes sequentially as you press INPUT SELECTOR +/– on the receiver or S-AIR CH of the S-AIR receiver.

■ When "SEPARATE" is set
The S-AIR receiver's function changes by pressing S-AIR CH of the S-AIR receiver.

Notes
- When "FM TUNER" or "AM TUNER" is selected on the S-AIR main unit, you can only select the same band for the tuner on the S-AIR receiver. However, you can select input other than TUNER on the S-AIR receiver.
- When a network function ("SERVER" or "Rhapsody" or "SHOUTcast") is selected on the S-AIR main unit, you can only select the same network function on the S-AIR receiver as function on the S-AIR main unit. However, you can select input other than network functions on the S-AIR receiver.

9 Adjust the volume on the S-AIR receiver.

Notes
- The sound of the S-AIR receiver may be cut off by operation of the S-AIR main unit.
- When the sound is other than 2 channel stereo, multi channel sound is downmixed to 2 channel.
- Signals with a sampling frequency of more than 96 kHz cannot output to the S-AIR receiver.

S-AIR Operations

To control the system from the S-AIR receiver

You can control the system from the S-AIR receiver by using the following buttons.

Press	Operation
►, ❙❙, ■, ◄◄/►►❙	Share the same operations on the remote
S-AIR CH	Change the function of the system

For details, refer to the operating instructions of the S-AIR receiver.

Changing the channel for better sound transmission

If you use multiple wireless systems which share the 2.4 GHz band, such as wireless LAN or Bluetooth, the transmission of S-AIR products or other wireless systems may be unstable. In this case, transmission may be improved by changing the "RF Change" setting.
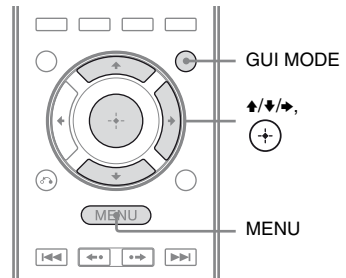
GUI MODE

▲/▼/➔,
⊕

MENU

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ▲/▼ repeatedly to select "🧰 Settings", then press ⊕ or ➔.

The Settings menu list appears on the TV screen.

3 Press ▲/▼ repeatedly to select "S-AIR", then press ⊕.

4 Press ▲/▼ repeatedly to select "RF Change", then press ⊕ or ➔.

5 Press ▲/▼ repeatedly to select the setting you want, then press ⊕.

- OFF: The system transmits sound by fixing the channel for transmitting.
- ON: The system transmits sound by searching for a better channel for transmitting.
- AUTO: Normally select this. The system changes "RF Change" to "ON" or "OFF" automatically.

6 Press GUI MODE.

The GUI menu turns off.

7 When you set "RF Change" to "OFF", select the ID so that sound transmission is most stable.

Notes
- In most cases, you will not need to change this setting.
- If "RF Change" is set to "OFF", transmission between the S-AIR main unit and S-AIR sub unit can be performed using one of the following channels.
  - S-AIR ID A: equivalent channel for IEEE 802.11b/g channel 1
  - S-AIR ID B: equivalent channel for IEEE 802.11b/g channel 6
  - S-AIR ID C: equivalent channel for IEEE 802.11b/g channel 11
- The transmission may be improved by changing the transmission channel (frequency) of the other wireless system(s). For details, refer to the operating instructions of the other wireless system(s).

Stabilizing S-AIR reception

Check the following when S-AIR reception is poor or unstable.
– Confirm the wireless adapters are inserted correctly (page 36).
– Confirm that the S-AIR IDs of the S-AIR main unit and sub unit are the same (page 95).

When S-AIR reception is poor

Check the following.
- Keep cords that are connected to the S-AIR product (AC power cord (mains lead), speaker cords, or other cords) away from the wireless adapter and slot.
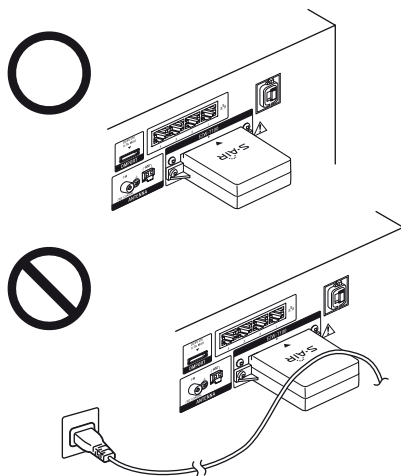
- Keep as much space as possible around S-AIR products.
  - Avoid placing S-AIR products on top of or directly below other electronic equipment.
  - Avoid placing S-AIR products in a closed rack, metal rack or under a table.

• Adjust the location (height, orientation, and place in the room) of S-AIR products until reception is the most stable.
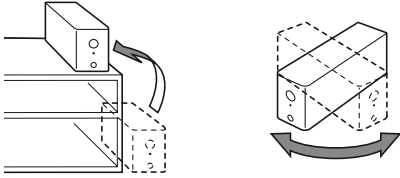
– Place so that the wireless adapters of the S-AIR main unit and sub unit are closer.
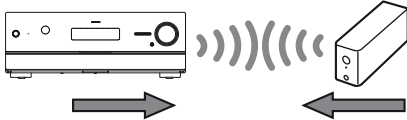
– Place so that S-AIR products are separated from other wireless devices.
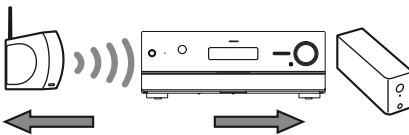
– Place so that S-AIR products are separated from metal doors or tables.

If you still cannot improve S-AIR reception, change the "RF Change" setting (page 100).

Enjoying the S-AIR receiver while the S-AIR main unit is in standby mode

(For the S-AIR receiver only (not supplied))

You can enjoy the S-AIR receiver while the S-AIR main unit is in standby mode by setting "S-AIR Standby" to "ON".
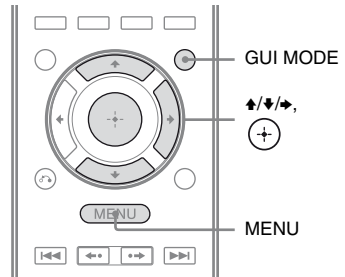
GUI MODE

↑/↓/→,
⊕

MENU

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ↑/↓ repeatedly to select "🧰 Settings", then press ⊕ or →.

The Settings menu list appears on the TV screen.

3 Press ↑/↓ repeatedly to select "S-AIR", then press ⊕.

4 Press ↑/↓ repeatedly to select "S-AIR Standby", then press ⊕ or →.

5 Press ♦/♦ repeatedly to select the setting you want.

- OFF: You cannot enjoy the S-AIR receiver while the S-AIR main unit is in standby mode.
- ON: You can enjoy the S-AIR receiver while the S-AIR main unit is in standby mode or turned on.

To exit the menu

Press MENU.

Notes

- When you set "S-AIR Standby" to "ON", the power consumption increases during the standby mode.
- When the wireless transmitter is removed from the S-AIR main unit, "S-AIR Standby" is set to "OFF" automatically.
- When "S-AIR Mode" is set to "SEPARATE", if you have selected "FM TUNER" or "AM TUNER" on the S-AIR main unit before you turn it off and "S-AIR Standby" is set to "ON", you can only select the same band for the tuner on the S-AIR receiver. However, you can select input other than TUNER on the S-AIR receiver.
- When "S-AIR Mode" is set to "SEPARATE", if you have selected a network function ("SERVER" or "Rhapsody" or "SHOUTcast") on the S-AIR main unit before you turn it off and "S-AIR Standby" is set to "ON", you can only select the same network function on the S-AIR receiver as function on the S-AIR main unit. However, you can select input other than network functions on the S-AIR receiver.
- The sound of the S-AIR receiver may be cut off by operation of the S-AIR main unit.
- When the receiver is in standby mode, "A. STANDBY" appears on the display if "S-AIR Standby" is set to "ON".

Switching between digital and analog audio (INPUT MODE)

When you connect components to both digital and analog audio input jacks on the receiver, you can fix the audio input mode to either of them, or switch from one to the other, depending on the type of material you intend to watch.

1 Press INPUT SELECTOR +/– on the receiver to select the input.

You can also use the input buttons on the remote.

2 Press INPUT MODE repeatedly on the receiver to select the audio input mode.

The selected audio input mode appears on the display.

- AUTO
  Gives priority to digital audio signals when there are both digital and analog connections.
  If there are no digital audio signals, analog audio signals are selected.
  When TV input is selected, priority is given to the Audio Return Channel (ARC) signals. If your TV is not compatible with the Audio Return Channel (ARC) function, the digital optical audio signals are selected.
- OPT
  Appears only when TV input is selected, and specifies the digital optical audio signals input to the TV OPTICAL IN jack.
- ANALOG
  Specifies the analog audio signals input to the AUDIO IN (L/R) jacks.

Notes

• Some audio input modes may not be set up depending on the input.
• When the HDMI 1-4 input, DMPORT, SERVER, Rhapsody, SHOUTcast, or SIRIUS input is selected, "------" appears on the display, and you cannot select other modes. Select another input, then set the audio input mode.
• When "A. DIRECT" is being used, audio input is automatically set to "ANALOG". You cannot select other modes.
• The Audio Return Channel (ARC) function does not work in the following cases.
    – Your TV is not compatible with the Audio Return Channel (ARC) function.
    – "Control for HDMI" is set to "OFF".
    – When you do not connect the receiver to the ARC compatible TV's HDMI jack via an HDMI cable.

Enjoying the sound/images from other inputs
(Input Assign)

You can reassign audio and/or video signals to another input when they are not currently being used.
For example when you want to input the only digital optical audio signals and component video signals from the DVD player:
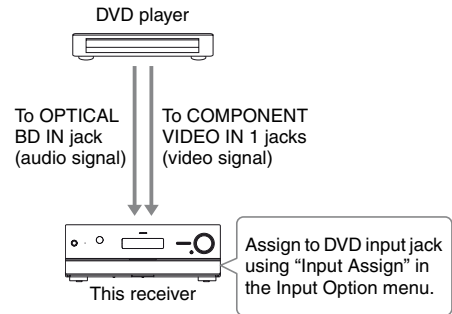
DVD player

To OPTICAL BD IN jack (audio signal)   To COMPONENT VIDEO IN 1 jacks (video signal)

This receiver   Assign to DVD input jack using "Input Assign" in the Input Option menu.

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ✦/✦ repeatedly to select "⊡ Input", then press ⊕ or ➔.

3 Press ✦/✦ repeatedly to select the input name you want to assign.

4 Press TOOLS/OPTIONS.

The options menu appears.

5 Press ✦/✦ repeatedly to select "Input Assign", then press ⊕ or ➔.

The "Input Assign" screen appears.

6 Select the audio and/or video signals you want to assign to the input which you selected in step 3 using ↑/↓/←/→.

7 Press ⊕.

Input name		BD	DVD	SAT/CATV	Video1	Video2	SA-CD/CD	HDMI1	HDMI2	HDMI3	HDMI4
Assignable video input jacks	Component1	○*	○	○	○	○	○	○**	○**	○**	○**
	Component2	○	○*	○	○	○	○	○**	○**	○**	○**
	Component3	○	○	○*	○	○	○	○**	○**	○**	○**
	Composite	○	–	○	○*	○*	–	–	–	–	–
	HDMI1	○	○	○	○	○	○	○*	–	–	–
	HDMI2	○	○	○	○	○	○	–	○*	–	–
	HDMI3	○	○	○	○	○	○	–	–	○*	–
	HDMI4	○	○	○	○	○	○	–	–	–	○*
	None	○	○	○	○	○	○*	–	–	–	–
Assignable audio input jacks	DVD COAX	○	○*	○	○	○	○	–	–	–	–
	BD OPT	○*	○	–	○	○	○	–	–	–	–
	SAT OPT	–	○	○*	○	○	○	–	–	–	–
	Analog	○	–	○	○*	○*	○*	–	–	–	–

* Initial setting

**When you assign a component video input to the HDMI input via the Input Assign menu, component video signals are not converted to HDMI video signals and are not output from the HDMI TV OUT jack. Component video signals are output from the COMPONENT VIDEO MONITOR OUT jack. In this case, the resolution of the GUI output is set to "480p" for both component video input and HDMI video input.

Notes
- You cannot assign other optical input to the inputs to which optical input jack is initially assigned.
- When you assign the digital audio input, the INPUT MODE setting may change automatically.
- You cannot reassign more than one HDMI input to the same input.
- You cannot reassign more than one digital audio input to the same input.
- You cannot reassign more than one component video input to the same input.
- When you assign a component video input to the HDMI input, set "Control for HDMI" to "OFF".

Other Operations

Using a bi-amplifier connection

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

2 Press ▲/▼ repeatedly to select "🧳 Settings" then press ⊕ or ➡.

The Settings menu list appears on the TV screen.

3 Press ▲/▼ repeatedly to select "Speaker", then press ⊕.

4 Press ▲/▼ repeatedly to select "Speaker Pattern", then press ⊕ or ➡.

5 Press ▲/▼ repeatedly to select the appropriate speaker pattern so that there are no surround back speakers and front high speakers, then press ⊕.

6 Press ▲/▼ repeatedly to select "Sur Back Assign", then press ⊕ or ➡.

7 Press ▲/▼ repeatedly to select "BI-AMP", then press ⊕.

The same signals output from the SPEAKERS FRONT A terminals can be output from the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals.

To exit the menu

Press MENU.

Notes
• Set "Sur Back Assign" to "BI-AMP" before you perform Auto Calibration.
• If you set "Sur Back Assign" to "BI-AMP", the speaker level and distance settings of the surround back speakers and front high speakers become invalid, and those of the front speakers are used.

Adjusting Settings

Using the Settings menu

You can adjust various settings for speakers, surround effects, etc. using the Settings menu. To display the menu of the receiver on the TV screen, make sure that the receiver is in "GUI MODE" by following the steps in "To turn "GUI MODE" on and off" (page 52).
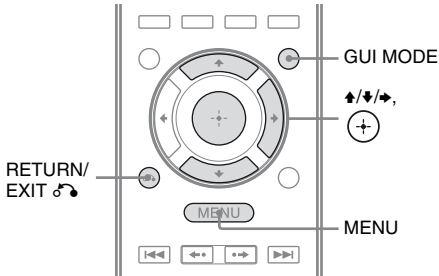
RETURN/
EXIT

GUI MODE

▲/▼/◀/▶,
⊕

MENU

1 Press GUI MODE.

After "GUI ON" appears on the display for a while, the GUI menu appears on the TV screen.
Press MENU if the GUI menu does not appear on the TV screen.

Input ▶	BD
♫	DVD
	SAT/CATV
🖼	TV
🎞	Video1
	Video2
🎮	SA-CD/CD
▼	
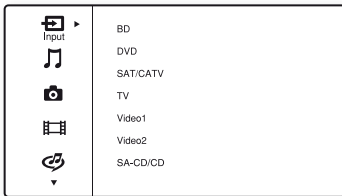
2 Press ▲/▼ repeatedly to select "🧰 Settings", then press ⊕ or ▶ to enter the menu mode.

The Settings menu list appears on the TV screen.

	Auto Calibration
	Speaker
	Surround
	EQ
	Audio
	Video
🧰 ▶	HDMI
▼	
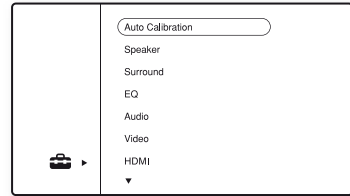
3 Press ▲/▼ repeatedly to select the menu item you want, then press ⊕.

Example: When you select "Auto Calibration".
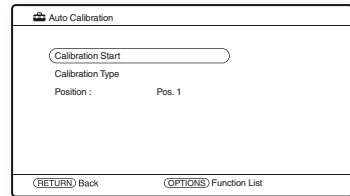
🧰 Auto Calibration	
Calibration Start	
Calibration Type	
Position :	Pos. 1
(RETURN) Back	(OPTIONS) Function List

4 Press ▲/▼ repeatedly to select the parameter you want, then press ⊕.

To return to the previous screen
Press RETURN/EXIT.

To exit the menu
Press MENU.

Adjusting Settings

Settings menu list

Settings menu	Description
Auto Calibration	Sets the speaker level or distance and makes the measurement automatically (page 108).
Speaker	Sets the speaker position manually (page 109).
Surround	Selects the sound field and adjusts the surround effect you choose (page 113).
EQ	Adjusts the equalizer (bass/treble sound) (page 114).
Audio	Sets various sound items (page 114).
Video	Adjusts the resolution of analog video signals (page 116).
HDMI	Makes settings for sound/images from components connected to the HDMI jacks (page 117).
Network	Makes settings for the network (page 118).
S-AIR	Makes settings for S-AIR operations (page 94).
System	Makes settings for the system of the receiver (page 121).

Auto Calibration menu

Calibration Start

Lets you perform Auto Calibration. For details, see "Calibrating the appropriate speaker settings automatically (Auto Calibration)" (page 42).

Note

The measurement results will be overwritten and saved as the current seating position you select in "Position" parameter.

Calibration Type

Lets you select the calibration type for each seating position. For details, see "3: Saving the measurement results" (page 46).

Note

You can select this parameter only when you have performed the Auto Calibration and saved the measurement result.

Position

You can register 3 patterns as Pos. 1, 2, and 3, depending on the seating position, listening environment, and measurement conditions.

To register settings for the listening environment

You can select the seating position you want and register the measurement results of the Auto Calibration for that seating position.

1 Press ♠/♦ repeatedly to select the position (Pos. 1, 2, 3) for which you want to register the measurement result, then press ⊕.

2 Press ♠/♦ repeatedly to select "Calibration Start", then press ⊕ or ➡.

3 Press ♦/♦ repeatedly and ⊕ to uncheck the items you do not want to measure, then press ➡.

The confirmation screen, asking whether you are ready to start measurement, appears.

4 Press ⊕ to select "Start".

The measurement results is registered as the position you selected in step 1.

5 Repeat step 1 to 4 to register another seating position.

To select the registered seating position

Press ♦/♦ repeatedly to select the position (Pos. 1, 2, 3) you want, then press ⊕.
The registered seating position is selected.

To name the seating position

You can rename the position name.

1 Select the position (Pos. 1, 2, 3) you want, then press ⊕.

2 Press TOOLS/OPTIONS.

3 Select "Name Input", then press ⊕.

4 Press ♦/♦ repeatedly to select a character, then press ➡.

You can move the input position backward and forward by pressing ♦/➡.

5 Repeat step 4 to input a character one by one, then press ⊕.

The name you entered is registered.

Speaker Settings menu

You can adjust each speaker manually.
You can also adjust the speaker levels after the Auto Calibration is completed.

Note
The speaker settings are only for the current seating position.

Speaker Pattern

Select "Speaker Pattern" according to the speaker system which you are using. Select the speaker pattern before you perform Auto Calibration.

Sur Back Assign

Lets you set the SPEAKERS SURROUND BACK/FRONT HIGH/BI-AMP/FRONT B terminals for a bi-amplifier or speakers front B connection.

■ OFF

■ BI-AMP

■ SPEAKER B

Note
When you change the connection from a bi-amplifier or speakers front B to surround back or front high speakers connection, set "Sur Back Assign" to "OFF", then set up the speakers again. See "Auto Calibration" (page 42) or "Manual Setup" (page 110).

Adjusting Settings

Manual Setup

You can adjust each speaker manually on the "Manual Setup" screen. You can also adjust the speaker levels after the Auto Calibration is completed.

To adjust the speaker level

You can adjust each speaker's level (front left/right, front left/right high, center, surround left/right, surround back left/right, subwoofer).

1 Press ▲/▼/◀/▶ repeatedly to select the speaker on the screen for which you want to adjust the level, then press ⊕.

2 Press ◀/▶ repeatedly to select "Level".

3 Press ▲/▼ repeatedly to set the level of the selected speaker, then press ⊕.
For front left/right speakers, you can adjust the level from –10.0 dB to +10.0 dB in 0.5 dB steps. For other speakers, you can adjust the level from –20.0 dB to +10.0 dB in 0.5 dB steps.

Note
When one of the sound fields for music is selected, no sound is output from the subwoofer if all the speakers are set to "Large". However, the sound will be output from the subwoofer if
– the digital input signal contains LFE signals.
– the front or surround speakers are set to "Small".
– the sound field for movie is selected.
– "PORTABLE" is selected.

To adjust the distance from the seating position to each speaker

You can adjust the distance from the seating position to each speaker (front left/right, front left/right high, center, surround left/right, surround back left/right, subwoofer).

1 Press ▲/▼/◀/▶ repeatedly to select the speaker on the screen for which you want to adjust the distance from the seating position, then press ⊕.

2 Press ◀/▶ repeatedly to select "Distance".

3 Press ▲/▼ repeatedly to set the distance of the selected speaker, then press ⊕.
You can adjust the distance from 3 feet 3 inches to 32 feet 9 inches (1.00 meter to 10.00 meters) in 1 inch (0.01 meter) steps.

Notes
• Depending on the speaker pattern setting, some parameters may not be available.
• This function does not work in the following cases.
 – "A. DIRECT" is being used.
 – Signals with a sampling frequency of more than 96 kHz are being received.

To adjust the size of each speaker

You can adjust each speaker's (front left/right, front left/right high, center, surround left/right, surround back left/right) size.

1 Press ▲/▼/◀/▶ repeatedly to select the speaker on the screen for which you want to adjust the size, then press ⊕.

2 Press ◀/▶ repeatedly to select "Size".

3 Press ♦/♦ repeatedly to set the size of the selected speaker, then press ⊕.

- Large

  If you connect large speakers that will effectively reproduce bass frequencies, select "Large". Normally, select "Large".

- Small

  If the sound is distorted, or you feel a lack of surround effects when using multi channel surround sound, select "Small" to activate the bass redirection circuitry and output the bass frequencies of each channel from the subwoofer or other "Large" speakers.

Note

This function does not work when "A. DIRECT" is being used.

Tips

- The "Large" and "Small" settings for each speaker determine whether the internal sound processor will cut the bass signal from that channel.

  When the bass is cut from a channel, the bass redirection circuitry sends the corresponding bass frequencies to the subwoofer or other "Large" speakers.

  However, since bass sound has a certain amount of directionality, it is best not to cut it, if possible. Therefore, even when using small speakers, you can set them to "Large" if you want to output the bass frequencies from that speaker. On the other hand, if you are using a large speaker, but prefer not to have bass frequencies output from that speaker, set it to "Small".

  If the overall sound level is lower than you prefer, set all speakers to "Large". If there is not enough bass, you can use the equalizer to boost the bass levels.

- The surround back speakers will be set to the same setting as that of the surround speakers.

- When the front speakers are set to "Small", the center, surround, and front high speakers are also automatically set to "Small".

- If you do not use the subwoofer, the front speakers are automatically set to "Large".

Crossover Freq (Speaker crossover frequency)

Lets you set the bass crossover frequency of speakers that the speaker size has been set to "Small" in the Speaker Settings menu. Measured speaker crossover frequency is set for each speaker after the Auto Calibration.

1 Press ♦/♦ repeatedly to select the speaker on the screen you want to adjust, then press ⊕.

2 Press ♦/♦ repeatedly to adjust the value, then press ⊕.

Test Tone

You can select the test tone type on the "Test Tone" screen.

Note

Test tone is not output from the headphones connected to the S-AIR surround amplifier.

Tips

- To adjust the level of all speakers at the same time, press MASTER VOL +/− (RM-AAP055 only) or ∠ +/− (RM-AAP056 only). You can also use MASTER VOLUME on the receiver.

- The adjusted value is shown on the TV screen during adjustment.

To output test tone from each speaker

You can output test tone from the speakers in sequence.

1 Press ♦/♦ repeatedly to select "Test Tone", then press ⊕.

2 Press ▲/▼ repeatedly to adjust the parameter, then press ⊕.
- OFF
- AUTO

  The test tone is output from each speaker in sequence.
- L, C, R, SR, SB*, SBR, SBL, SL, LH, RH, SW

  You can select which speakers will output the test tone.

  * "SB" appears when only one surround back speaker is connected.

3 Press ▲/▼ repeatedly to adjust the speaker level, then press ⊕.

To output test tone from adjacent speakers

You can output test tone from adjacent speakers so that you can adjust the balance between the speakers.

1 Press ◄/► repeatedly to select "Phase Noise", then press ⊕.

2 Press ▲/▼ repeatedly to adjust the parameter, then press ⊕.
- OFF
- L/C, C/R, R/SL, R/SR, SR/SL, SR/SBR, SR/SB*, SBR/SBL, SB/SL*, SBL/SL, SL/L, L/SR, L/RH, LH/RH, LH/R

  Lets you output the test tone sequentially from adjacent speakers.
  Some items may not be displayed, depending on the setting of the speaker pattern.

  * "SR/SB" and "SB/SL" appear when only one surround back speaker is connected.

3 Press ▲/▼ repeatedly to adjust the speaker level, then press ⊕.

To output the source sound from adjacent speakers

You can output the source sound from adjacent speakers so that you can adjust the balance between the speakers.

1 Press ◄/► repeatedly to select "Phase Audio", then press ⊕.

2 Press ▲/▼ repeatedly to adjust the parameter, then press ⊕.
- OFF
- L/C, C/R, R/SL, R/SR, SR/SL, SR/SBR, SR/SB*, SBR/SBL, SB/SL*, SBL/SL, SL/L, L/SR, L/RH, LH/RH, LH/R

  Lets you output front 2 channel source sound (instead of the test tone) sequentially from adjacent speakers. Some items may not be displayed, depending on the setting of the speaker pattern.

  * "SR/SB" and "SB/SL" appear when only one surround back speaker is connected.

3 Press ▲/▼ repeatedly to adjust the speaker level, then press ⊕.

When a test tone is not output from the speakers
- The speaker cords may not be connected securely. Check to see if they are connected securely and cannot be disconnected by pulling on them slightly.
- The speaker cords may have the short-circuit problem.

When a test tone is output from a different speaker than the speaker displayed on the TV screen

The speaker pattern to the connected speaker is not set up correctly. Make sure the speaker connection and the speaker pattern match.

D.Range Comp (Dynamic range compression)

Lets you compress the dynamic range of the soundtrack. This may be useful when you want to watch movies at low volumes late at night. Dynamic range compression is possible with Dolby Digital sources only.

■ OFF

The dynamic range is not compressed.

■ AUTO

The dynamic range is compressed automatically.

■ STD

The dynamic range is compressed as intended by the recording engineer.

■ MAX

The dynamic range is compressed dramatically.

Tips
• Dynamic range compressor lets you compress the dynamic range of the soundtrack based on the dynamic range information included in the Dolby Digital signal.
• "STD" is the standard setting, but it only enacts light compression. Therefore, we recommend using the "MAX" setting. This greatly compresses the dynamic range and lets you view movies late at night at low volumes. Unlike analog limiters, the levels are predetermined and provide a very natural compression.

Distance Unit

Lets you select the unit of measure for setting distances.

■ meter

The distance is displayed in meters.

■ feet

The distance is displayed in feet.

Surround Settings menu

You can select the sound field and adjust the effect level, etc. on the "Sound Field Setup" screen.
For details on the sound field, see "Enjoying Surround Sound" (page 73).

Note
The setup items you can adjust on each menu vary depending on the sound field.

To select the sound field

1 Press ⬆/⬇ repeatedly to select Sound Field you want.

2 Press RETURN/EXIT ⟲.

To adjust the effect level for Cinema Studio EX A/B/C

1 Press ⬆/⬇ repeatedly to select "Cinema St EX A", "Cinema St EX B" or "Cinema St EX C", then press ⊕.

2 Press ⬆/⬇ repeatedly to select the Effect Level you want, then press ⬅.
• 150%
• 100%
• 80%
• 50%

Adjusting Settings

EQ Settings menu

You can use the following parameters to adjust the tonal quality (bass/treble level) of front speakers.
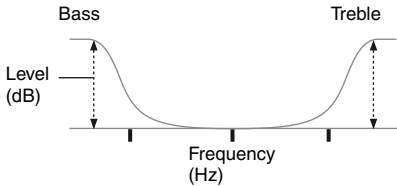
Note
This function does not work in the following cases.
– "A. DIRECT" is being used.
– Signals with a sampling frequency of more than 48 kHz are being received.

To adjust the equalizer on the EQ screen

1 Press (+).

2 Press ←/→ repeatedly to select "Bass" or "Treble".

3 Press ▲/▼ repeatedly to adjust the gain, then press (+).

Audio Settings menu

You can make settings for the audio to suit your preference.

A/V Sync (Synchronizes audio with video output)

Lets you delay the output of audio to minimize the time gap between audio output and visual display.

■ 0 ms – 300 ms
You can adjust the delay from 0 ms to 300 ms in 10 ms steps.

Notes
• This function is useful when you use a large LCD or plasma monitor or a projector.
• This function does not work in the following cases.
  – "A. DIRECT" is being used.
  – Signals with a sampling frequency of more than 96 kHz are being received.

Dual Mono (Digital broadcast language selection)

Lets you select the language you want when you listen to the dual audio of a digital broadcast. This feature only functions for Dolby Digital sources.

■ MAIN/SUB
Sound of the main language will be output through the front left speaker and sound of the sub language will be output through the front right speaker simultaneously.

■ MAIN
Sound of the main language will be output.

■ SUB
Sound of the sub language will be output.

Decode Priority (Digital audio input decoding priority)

Lets you specify the input mode for the digital signal input to the DIGITAL IN jacks or HDMI IN jacks.

■ PCM

When signals from the DIGITAL IN jack are selected, PCM signals are given priority (to prevent interruption when playback starts). However, when other signals are input, there may be no sound, depending on the format. In this case, set this item to "AUTO". When signals from the HDMI IN jack are selected, only PCM signals are output from the connected player. When signals other than PCM are received, set this item to "AUTO".

■ AUTO

Automatically switches the input mode between DTS, Dolby Digital, or PCM.

Notes
• Even when "Decode Priority" is set to "PCM", the sound may be interrupted at the very beginning of the first track depending on the CD being played back.
• When playback a DTS CD, set "Decode Priority" to "AUTO" to prevent noise being output.

Adjusting Settings

Video Settings menu

You can make settings for video.

Resolution (Converting video signals)

Lets you convert the resolution of analog video input signals.

"Resolution" parameter	Output from / Input from	HDMI TV OUT jack	COMPONENT VIDEO MONITOR OUT jacks	MONITOR VIDEO OUT jack
■ Direct	COMPONENT VIDEO IN jacks	–	○	–
	VIDEO IN jacks	–	–	○
■ Auto (initial setting)	COMPONENT VIDEO IN jacks	●a)	●b)	●b)
	VIDEO IN jacks		●b)	●b)
■ 480i/576i	COMPONENT VIDEO IN jacks	●c)	●	●
	VIDEO IN jacks	●c)	●	●
■ 480p/576p	COMPONENT VIDEO IN jacks	●	●	–
	VIDEO IN jacks	●	●	○
■ 720p ■ 1080i	COMPONENT VIDEO IN jacks	●	●d)	–
	VIDEO IN jacks	●	●d)	○
■ 1080p	COMPONENT VIDEO IN jacks	●	○	–
	VIDEO IN jacks	●	–	○

● : Video signals are converted and output through the video converter.

○ : The same type of signal as that of the input signal is output. Video signals are not converted.

– : Video signals are not output.

a) The resolution is set automatically, depending on the connected monitor.

b) When the TV is connected to jacks other than the HDMI jacks, 480i/576i signals are output.

c) 480p/576p signals are output even if 480i/576i is set.

d) Video signals without copyright protection are output based on the settings menu. Video signals with copyright protection are output as 480p/576p.

Notes

• Video signals are not output from the COMPONENT VIDEO MONITOR OUT or MONITOR VIDEO OUT jacks when the monitor, etc., is connected to HDMI TV OUT jack.

• If you select a resolution that the connected TV does not support in the "Resolution" parameter, the images from the TV cannot be output correctly.

• Converted HDMI image output does not support x.v.Color (x.v.Colour), Deep Color (Deep Colour) and 3D image.

HDMI Settings menu

You can make the required settings for components connected to the HDMI jack.

Control for HDMI

Lets you turn the Control for HDMI function on or off. For details, see "Preparing for the "BRAVIA" Sync" (page 90).

■ ON

■ OFF

Note

When you set "Control for HDMI" to "ON", "Audio Out" may be changed automatically.

Pass Through

Lets you output the HDMI signals to the TV even when the receiver is in standby mode.

■ OFF

The receiver does not output HDMI signals when the receiver is in the standby mode. Turn on the receiver to enjoy the connected component's source on the TV. This setting saves power in the standby mode compared with the "ON" setting.

■ AUTO

When the TV is turned on while the receiver is in the standby mode, the receiver outputs HDMI signals from the receiver's HDMI TV OUT jack. Sony recommends this setting if you use a TV that is compatible with "BRAVIA" Sync. This setting saves power in the standby mode compared with the "ON" setting.

■ ON

When the receiver is in the standby mode, the receiver continuously outputs HDMI signals from the receiver's HDMI TV OUT jack.

Notes
- This parameter is not available when "Control for HDMI" is set to "OFF".
- When "AUTO" is selected, it may take a little more time for the image and sound to be output to the TV than when "ON" is selected.
- When the receiver is in standby mode, "A. STANDBY" appears on the display if "Pass Through" is set to "AUTO" or "ON". However, "A. STANDBY" will disappear when "Pass Through" is set to "AUTO" and no signals are detected.

Audio Out

Lets you set the HDMI audio signals from the playback component connected to the receiver via an HDMI connection.

■ TV+AMP

The sound is output from TV's speaker and the speakers connected to the receiver.

Notes
- The sound quality of the playback component depends on the TV's sound quality, such as the number of channels, and the sampling frequency, etc. When the TV has stereo speakers, the sound output from the receiver is also stereo as that of the TV, even if you play back multi channel source.
- When you connect the receiver to an image display component (projector, etc.), sound may not be output from the receiver. In this case, select "AMP".
- When you select the input that you have assigned the HDMI input, sound does not output from the TV.

■ AMP

The HDMI audio signals from the playback component is only output to the speakers connected to the receiver. Multi channel sound can be played back as it is.

Note

Audio signals are not output from the TV's speaker when "Audio Out" is set to "AMP".

Adjusting Settings

Subwoofer Level

Lets you set the level of the subwoofer to 0 dB or +10 dB when PCM signals are input via an HDMI connection. You can set the level for each HDMI input independently.

■ 0 dB

■ +10 dB

■ AUTO
Automatically sets the level to 0 dB or +10 dB depending on the audio stream.

Subwoofer LPF (Subwoofer Low Pass Filter for HDMI)

Lets you turn the low pass filter for the subwoofer output on or off. The low-pass filter works when PCM signals are input via an HDMI connection. Turn the function on if you connect a subwoofer without the crossover frequency function.

■ OFF
The low pass filter of the subwoofer is turned off.

■ ON
The low pass filter of the subwoofer's cut off frequency is set to 120 Hz.

Network Settings menu

You can make the settings for the network.

Network Setup

Lets you make the network settings.

To check the network settings

1 Press ♦/♦ repeatedly to select "Network Setup", then press ⊕.

2 Press ♦/♦ repeatedly to select "Network Information", then press ⊕. The network setting information of the receiver is displayed on the TV screen.

To configure network settings automatically

1 Press ♦/♦ repeatedly to select "Network Setup", then press ⊕.

2 Press ♦/♦ repeatedly to select "Internet Setup", then press ⊕.

3 Press ♦/♦ repeatedly to select "Connect Automatically (DHCP)", then press ⊕. "Success! The receiver is now connected to network." appears on the TV screen.

4 Press ⊕ to select "Finish".

To set the IP address manually

1 Press ♦/♦ repeatedly to select "Network Setup", then press ⊕.

2 Press ♦/♦ repeatedly to select "Internet Setup", then press ⊕.

3 Press ♦/♦ repeatedly to select "Manual Configuration", then press ⊕. The setting screen for the IP address appears on the TV screen.

4 Press ▲/▼ repeatedly to select the IP address, then press ⊕.
The soft keyboard appears on the TV screen.

5 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter the IP address.

6 Press ▲/▼/◄/► to select "Finish", then press ⊕.

7 Press ► to display the next screen.

8 Repeat the process in steps 4 to 7 again to enter the Subnet Mask, Gateway address, DNS1 address, and DNS2 address.

9 Press ▲/▼ repeatedly to select "Test Connection", then press ⊕.
"Success! The receiver is now connected to network." appears on the TV screen.

10 Press ⊕ to select "Finish".

To set the Proxy server manually

1 Press ▲/▼ repeatedly to select "Network Setup", then press ⊕.

2 Press ▲/▼ repeatedly to select "Proxy Setup", then press ⊕.

3 Press ▲/▼ repeatedly to select "Enable", then press ⊕.

4 Press ⊕.
The soft keyboard appears on the TV screen.

5 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter the proxy server address.

6 Press ▲/▼/◄/► repeatedly to select "Finish", then press ⊕.

7 Press ► to select the Port number box, then press ⊕.
The soft keyboard appears on the TV screen.

8 Press ▲/▼/◄/► and ⊕ to select a character one by one to enter the port number.

9 Press ▲/▼/◄/► repeatedly to select "Finish", then press ⊕.

10 Press ►.

11 Press ▲/▼ repeatedly to select "Finish", then press ⊕.

External Control

Lets you turn the function which controls the receiver from external controllers on the home network on or off.

■ OFF

■ ON

Note
If you set "Controllers", set "External Control" to "ON".

Controllers

Lets you set availability of operations allowed for the receiver for network controllers on the home network that have attempted to access the receiver in the past.

1 Press ▲/▼ repeatedly to select "Controllers", then press ⊕.
The setting screen used for Controllers appears on the TV screen.

2 Press ▲/▼ repeatedly to select the controller you want to allow to operate the receiver from the list, then press ⊕ to check the box.
When you check the box for "Auto Permission", all the controllers detected are checked automatically.

3 Press ▲/▼/◄/► repeatedly to select "Finish", then press ⊕.

Adjusting Settings

continued

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To cancel the setup

Press ♦/♦ repeatedly to select "Cancel", then press ⊕ in step 3.

To remove the detected controllers from the list

1 Press ♦/♦ repeatedly to select the controller you want to remove from the list, then press ⊕ to check the box.

2 Press ♦/♦ repeatedly to select "Remove All", then press ⊕.

Tip

Up to 10 network controllers that have attempted to access the receiver are listed, and each of them can control the receiver.

Device Name

Lets you assign a device name to the receiver up to 20 characters displayed as being on the home network.

To assign the device name

1 Press ♦/♦ repeatedly to select "Device Name", then press ⊕.

2 Press ⊕.
The soft keyboard appears on the TV screen.

3 Press ♦/♦/♦/♦ and ⊕ to select a character one by one to enter the device name.

4 Press ♦/♦/♦/♦ repeatedly to select "Finish", then press ⊕.
When the setting is applied to the receiver, the receiver will restart automatically.

Tip

The default device name is "STR-DN2010".

Rhapsody Account

Lets you enter the Rhapsody Account to listen to the Rhapsody Internet radio service. For details, see "Setting an account" (page 83). Rhapsody is only available in the U.S.

Network Standby

Lets you turn the function that activates the switching hubs on the rear of the receiver and allows external control devices to control the receiver on or off even when the receiver is in standby mode.

■ OFF

The network function turns off when the receiver is in standby mode.

■ ON

The network function works even when the receiver is in standby mode.
In addition, the start-up time of the network function is reduced after the receiver is turned on.

Note

When the receiver is in standby mode,
"A. STANDBY" appears on the display if "Network Standby" is set to "ON".

System Settings menu

You can customize the settings of the receiver.

Auto Standby

Lets you set the receiver switch to standby mode automatically when you do not operate the receiver or when there is no signals input to the receiver.

■ OFF

Does not switch to standby mode.

■ ON

Switches to standby mode after approximately 30 minutes.

Notes

• This function does not work in the following cases.
  – "FM TUNER", "AM TUNER", "SIRIUS", "SERVER", "Rhapsody" or "SHOUTcast" input is selected.
  – S-AIR receiver or surround amplifier is used.
  – "External Control" is set to "ON".
• If you use the Auto standby mode and the Sleep Timer at the same time, the Sleep Timer has priority.

Software Version

You can check the version of the software on the system of the receiver, and you can also update the software of the receiver.
You can also update the software of the receiver using the Setup Manager application software provided on the CD-ROM supplied with the receiver. For details, see "Updating the receiver software using the Setup Manager" (page 89).

To update the receiver using the menu

1 Press ▲/▼ repeatedly to select "Software Version", then press ⊕.

2 Select "Update via Internet", then press ⊕.
The current software version and latest software version are displayed on the TV screen.

3 Press ◄/► repeatedly to select "Update", then press ⊕.
A confirmation screen appears on the TV screen.

4 Press ◄/► repeatedly to select "Start", then press ⊕.
Receiver updating starts.
The MULTI CHANNEL DECODING indicator on the front panel flashes while updating.
When the updating complete, the receiver will restart automatically.

Notes

• In the following cases, a message appears on the TV screen and the update of the receiver is not performed.
  – When all versions are the latest one.
  – When the receiver cannot retrieve the data, such as when the network has not been set up, or when the server is down, etc.
• Do not turn the receiver off or disconnect the network cable during software updating. It may cause a malfunction.
• It may take 50 minutes for the software updating to complete.

Adjusting Settings

Operating without connecting to a TV

You can operate this receiver using the display even if the TV is not connected to the receiver.

AMP

GUI MODE

▲/▼/◄/►,
⊕

RETURN/
EXIT ᕫ

MENU

Using the menu in the display

Press GUI MODE repeatedly to select "GUI OFF".

The receiver is switched to front panel display mode.

1 Press AMP.

2 Press MENU.

3 Press ▲/▼ repeatedly to select the menu you want, then press ⊕ or ►.

4 Press ▲/▼ repeatedly to select the parameter you want to adjust, then press ⊕ or ►.
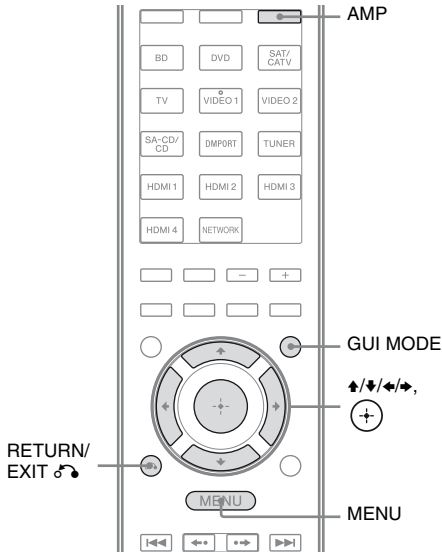
5 Press ▲/▼ repeatedly to select the setting you want, then press ⊕.

To return to the previous display

Press ◄ or RETURN/EXIT ᕫ.

To exit the menu

Press MENU.

Note

Some parameters and settings may appear dimmed on the display. This means that they are either unavailable or fixed and unchangeable.

Overview of the menus

The following options are available in each menu. For details on navigating through menus, see page 122.

Menu [Display]	Parameters [Display]	Settings	Initial setting
Auto Calibration settings [<AUTO CAL>]	Auto Calibration start [A.CAL START]		
	Calibration type [CAL TYPE]	FULL FLAT, ENGINEER, FRONT REF, OFF	FULL FLAT
	Position [POSITION]	POS. 1, POS. 2, POS. 3	POS. 1
	Naming position [NAME IN]	For details, see "To name the seating position" (page 109).	
Level settings [<LEVEL>]	Test tone[a] [TEST TONE]	OFF, FIX ■■■[b], AUTO ■■■[b]	OFF
	Phase noise[a] [P. NOISE]	OFF, LH/FR, LH/RH, FL/RH, FL/SR, SL/FL, SB/SL, SBL/SL, SBR/SBL, SR/SB, SR/SBR, SR/SL, FR/SR, FR/SL, CNT/FR, FL/CNT	OFF
	Phase audio[a] [P. AUDIO]	OFF, LH/FR, LH/RH, FL/RH, FL/SR, SL/FL, SB/SL, SBL/SL, SBR/SBL, SR/SB, SR/SBR, SR/SL, FR/SR, FR/SL, CNT/FR, FL/CNT	OFF
	Front left speaker level[a] [FL LEVEL]	FL –10.0 dB to FL +10.0 dB (0.5 dB per step)	FL 0 dB
	Front right speaker level[a] [FR LEVEL]	FR –10.0 dB to FR +10.0 dB (0.5 dB per step)	FR 0 dB
	Center speaker level[a] [CNT LEVEL]	CNT –20.0 dB to CNT +10.0 dB (0.5 dB per step)	CNT 0 dB
	Surround left speaker level[a] [SL LEVEL]	SL –20.0 dB to SL +10.0 dB (0.5 dB per step)	SL 0 dB
	Surround right speaker level[a] [SR LEVEL]	SR –20.0 dB to SR +10.0 dB (0.5 dB per step)	SR 0 dB
	Surround back speaker level[a] [SB LEVEL]	SB –20.0 dB to SB +10.0 dB (0.5 dB per step)	SB 0 dB
	Surround back left speaker level[a] [SBL LEVEL]	SBL –20.0 dB to SBL +10.0 dB (0.5 dB per step)	SBL 0 dB
	Surround back right speaker level[a] [SBR LEVEL]	SBR –20.0 dB to SBR +10.0 dB (0.5 dB per step)	SBR 0 dB
	Front left high speaker level[a] [LH LEVEL]	LH –20.0 dB to LH +10.0 dB (0.5 dB step)	LH 0 dB
	Front right high speaker level[a] [RH LEVEL]	RH –20.0 dB to RH +10.0 dB (0.5 dB step)	RH 0 dB

Adjusting Settings

Menu [Display]	Parameters [Display]	Settings	Initial setting
	Subwoofer level[a) [SW LEVEL]	SW –20.0 dB to SW +10.0 dB (0.5 dB per step)	SW 0 dB
	Dynamic range compression [D. RANGE]	COMP. MAX, COMP. STD, COMP. AUTO, COMP. OFF	COMP. AUTO
Speaker settings [<SPEAKER>]	Speaker pattern [SP PATTERN]	5/2.1 to 2/0 (20 patterns)	3/4.1
	Front speakers size[a) [FRT SIZE]	LARGE, SMALL	LARGE
	Center speaker size[a) [CNT SIZE]	LARGE, SMALL	LARGE
	Surround speakers size[a) [SUR SIZE]	LARGE, SMALL	LARGE
	Front high speakers size[a) [FH SIZE]	LARGE, SMALL	LARGE
	Surround back speaker assign[c) [SB ASSIGN]	SPK B, BI-AMP, OFF	OFF
	Front left speaker distance[a) [FL DIST.]	FL 3'3" to FL 32'9" (FL 1.00 m to FL 10.00 m) (1 inch (0.01 m) step)	FL 9'10" (FL 3.00 m)
	Front right speaker distance[a) [FR DIST.]	FR 3'3" to FR 32'9" (FR 1.00 m to FR 10.00 m) (1 inch (0.01 m) step)	FR 9'10" (FR 3.00 m)
	Center speaker distance[a) [CNT DIST.]	CNT 3'3" to CNT 32'9" (CNT 1.00 m to CNT 10.00 m) (1 inch (0.01 m) step)	CNT 9'10" (CNT 3.00 m)
	Surround left speaker distance[a) [SL DIST.]	SL 3'3" to SL 32'9" (SL 1.00 m to SL 10.00 m) (1 inch (0.01 m) step)	SL 9'10" (SL 3.00 m)
	Surround right speaker distance[a) [SR DIST.]	SR 3'3" to SR 32'9" (SR 1.00 m to SR 10.00 m) (1 inch (0.01 m) step)	SR 9'10" (SR 3.00 m)
	Surround back speaker distance[a) [SB DIST.]	SB 3'3" to SB 32'9" (SB 1.00 m to SB 10.00 m) (1 inch (0.01 m) step)	SB 9'10" (SB 3.00 m)
	Surround back left speaker distance[a) [SBL DIST.]	SBL 3'3" to SBL 32'9" (SBL 1.00 m to SBL 10.00 m) (1 inch (0.01 m) step)	SBL 9'10" (SBL 3.00 m)
	Surround back right speaker distance[a) [SBR DIST.]	SBR 3'3" to SBR 32'9" (SBR 1.00 m to SBR 10.00 m) (1 inch (0.01 m) step)	SBR 9'10" (SBR 3.00 m)
	Front left high speaker distance[a) [LH DIST.]	LH 3'3" to LH 32'9" (LH 1.00 m to LH 10.00 m) (1 inch (0.01 m) step)	LH 9'10" (LH 3.00 m)
	Front right high speaker distance[a) [RH DIST.]	RH 3'3" to RH 32'9" (RH 1.00 m to RH 10.00 m) (1 inch (0.01 m) step)	RH 9'10" (RH 3.00 m)

Menu [Display]	Parameters [Display]	Settings	Initial setting
	Subwoofer distance[a)] [SW DIST.]	SW 3'3" to SW 32'9" (SW 1.00 m to SW 10.00 m) (1 inch (0.01 m) step)	SW 9'10" (SW 3.00 m)
	Distance unit [DIST. UNIT]	FEET, METER	FEET[d)]
	Front speakers crossover frequency[e)] [FRT CROSS]	CROSS 40 Hz to CROSS 200 Hz (10 Hz step)	CROSS 120 Hz
	Center speaker crossover frequency[e)] [CNT CROSS]	CROSS 40 Hz to CROSS 200 Hz (10 Hz step)	CROSS 120 Hz
	Surround speakers crossover frequency[e)] [SUR CROSS]	CROSS 40 Hz to CROSS 200 Hz (10 Hz step)	CROSS 120 Hz
	Front high speakers crossover frequency[e)] [FH CROSS]	CROSS 40 Hz to CROSS 200 Hz (10 Hz step)	CROSS 120 Hz
Surround settings [<SURROUND>]	Effect level[f)] [EFFECT]	EFCT. 150%, EFCT. 100%, EFCT. 80%, EFCT. 50%	EFCT. 100%
EQ settings [<EQ>]	Front speakers bass level [FRT BASS]	FRT B. −10.0 dB to FRT B. +10.0 dB (0.5 dB step)	FRT B. 0 dB
	Front speakers treble level [FRT TREBLE]	FRT T. −10.0 dB to FRT T. +10.0 dB (0.5 dB step)	FRT T. 0 dB
Tuner settings [<TUNER>]	FM station receiving mode [FM MODE]	STEREO, MONO	STEREO
	Naming preset stations [NAME IN]	For details, see "Naming preset stations (Name Input)" (page 64).	
	Sirius parental lock[g)] [PARENTAL]	LOCK ON, LOCK OFF	LOCK OFF
	Sirius lock code edit[g)] [CODE EDIT]	For details, see "Restricting access to specific channels (Parental Lock)" (page 70).	0000
	Sirius antenna aiming[g)] [SR ANT AIM]	For details, see "Checking receiving conditions (Antenna Aiming)" (page 67).	
	Sirius radio ID[g)] [SIRIUS ID]	For details, see "Checking the ID number" (page 66).	

Adjusting Settings

Menu [Display]	Parameters [Display]	Settings	Initial setting
Audio settings [<AUDIO>]	Synchronizes audio with video output [A/V SYNC]	0 ms to 300 ms (10 ms step)	0 ms
	Digital broadcast language selection [DUAL MONO]	MAIN/SUB, MAIN, SUB	MAIN
	Digital audio input decoding priority [DEC. PRIO]	DEC. AUTO, DEC. PCM	DEC. AUTO
	Digital audio input assignment [A. ASSIGN]	For details, see "Enjoying the sound/images from other inputs (Input Assign)" (page 104).	
Video settings [<VIDEO>]	Resolution [RESOLUTION]	DIRECT, AUTO, 480/576i, 480/576p, 720p, 1080i, 1080p	AUTO
	Video input assignment [V. ASSIGN]	For details, see "Enjoying the sound/images from other inputs (Input Assign)" (page 104).	
HDMI settings [<HDMI>]	Control for HDMI [CTRL: HDMI]	CTRL ON, CTRL OFF	CTRL ON
	Pass Through [PASS THRU]	ON, AUTO, OFF	OFF
	Audio out [AUDIO OUT]	AMP, TV+AMP	AMP
	Subwoofer level for HDMI[h] [SW LEVEL]	SW AUTO, SW +10 dB, SW 0 dB	SW AUTO
	Subwoofer Low Pass Filter for HDMI[h] [SW L.P.F.]	L.P.F. ON, L.P.F. OFF	L.P.F. ON
S-AIR settings [<S-AIR>]	S-AIR ID[i] [S-AIR ID]	ID: A, ID: B, ID: C	ID: A
	S-AIR mode[i] [S-AIR MODE]	PARTY, SEPARATE	PARTY
	RF Change[i] [RF CHANGE]	RF AUTO, RF ON, RF OFF	RF AUTO
	S-AIR Standby[i] [S-AIR STBY]	STBY ON, STBY OFF	STBY OFF
	Pairing[i] [PAIRING]	START, CONDITION	START

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Menu [Display]	Parameters [Display]	Settings	Initial setting
System settings [<SYSTEM>]	Naming inputs [NAME IN]	For details, see "Naming the input (Name Input)" (page 55).	
	Auto standby mode [AUTO STBY]	ON, OFF	ON
	Version display [VER. X.XXX]		
	Updating from PC [UPDATE (PC)]	PERMIT, DENY	DENY

a) Depends on the speaker pattern setting, some parameters or settings may not be available.

b) ■■■ represent a speaker channel (FL, FR, CNT, SL, SR, SB, SBL, SBR, LH, RH, SW).

c) You can only select this parameter if "SP PATTERN" is not set to a setting with surround back or front high speakers (page 40).

d) "METER" for European model.

e) You can only select this parameter if your speaker is set to "SMALL".

f) You can only select this parameter if you select "C.ST.EX A", "C.ST.EX B" or "C.ST.EX C" as sound field.

g) This parameter is available for the USA model only. You can only select this parameter if the SiriusConnect Home tuner is connected to the SIRIUS jack on the receiver.

h) This parameter is only available when HDMI input is selected.

i) This parameter is only available if the S-AIR transmitter (not supplied) is inserted to the EZW-T100 slot on the receiver.

To view the information on the display

You can check the sound field, etc., by changing the information on the display.

1 Select the input for which you want to check the information.

2 Press AMP, then press DISPLAY repeatedly.
Each time you press DISPLAY, the display will change cyclically as follows.

Index name of the input[1] → Input you selected → Sound field currently applied → Volume level → Stream information[2]

When listening to FM and AM radio
Preset station name[1] → Frequency → Sound field currently applied → Volume level

When tuning in a channel from a SIRIUS (USA model only)
Channel name → Channel number → Category name → Artist name/Feature → Song/program title → Composer name → Signal strength → Sound field currently applied → Volume level

When receiving RDS broadcasts (European model only)
Program Service name[3], Preset name, Band, or Preset number → Frequency, band and preset number → Program Type indication[4] → Radio Text indication[5] → Clock Time → Sound field currently applied → Volume level

Adjusting Settings

[1]Index name appears only when you have assigned one to the input or preset station. Index name does not appear when only blank spaces have been entered or it is same as the input name.
[2]Stream information may not be displayed.
[3]This information also appears for non-RDS FM stations.
[4]Type of program being broadcast.
[5]Text messages sent by the RDS station.

Note

Character or marks may not be displayed for some languages.

Listening to the FM/AM radio

For details on the tuner function, see "Tuner Operations" (page 61).

Tuning radio stations

1 Press TUNER repeatedly to select the FM or AM band.
You can also use INPUT SELECTOR +/– on the receiver.

2 Press TUNING + or TUNING –.
Press TUNING + to scan from low to high frequencies, press TUNING – to scan from high to low frequencies. The receiver stops scanning whenever a station is received.

Selecting a frequency directly (Direct Tuning)

1 After selecting the FM or AM band, press D.TUNING.

2 Press SHIFT, then press numeric buttons to enter the frequency.

3 Press ⊕.

Presetting radio stations

1 Tune in the station that you want to preset.

For details on the operation, see "Tuning radio stations" (page 128).

2 Press SHIFT, then press MEMORY.

"MEM" lights up for a few seconds. Perform steps 3 and 4 before "MEM" disappears.

3 Press PRESET + or PRESET – to select a preset number.

30 FM and 30 AM preset numbers are available. If "MEM" disappears before you select the preset number, start again from step 2.

4 Press ENTER.

If SHIFT indicator is light off before you press ENTER, press SHIFT.
The station is stored as the selected preset number.
If "MEM" disappears before you press ENTER, start again from step 2.

5 Repeat steps 1 to 4 to preset another station.

Selecting a preset station

1 Press TUNER repeatedly to select the FM or AM band.

2 Press PRESET + or PRESET – repeatedly to select the preset station you want.
You can also press SHIFT, then press numeric buttons to select the preset station you want. Then, press ⊕ to enter the selection.

Listening to satellite radio

(USA model only)

For details on SIRIUS Radio service, see "Listening to Satellite Radio" (page 65) in "Tuner Operations".

Aiming the SIRIUS Antenna

You can use "SR ANT AIM" in the Tuner Settings menu to help you aim the antenna for optimal signal reception.

1 Press TUNER repeatedly to select "SIRIUS".
You can also use INPUT SELECTOR +/– on the receiver.

2 Press AMP.

3 Press MENU.

4 Press ♦/♦ repeatedly to select "<TUNER>".

5 Press ⊕ or ➡ to enter the menu.

6 Press ♦/♦ repeatedly to select "SR ANT AIM".

7 Press ⊕ or ➡ to enter the parameter.

8 While checking the parameter, aim your antenna to where the best reception will be received.
For details on the parameter, see "SIRIUS Signal strength" below.

SIRIUS Signal strength

Signal strength	Signal type	
	Satellite	Terrestrial
EXC (excellent)	S:3	T:3
GOOD	S:2	T:2
WEAK	S:1	T:1
NONE	S:0	T:0

Checking the ID number

1 Press TUNER repeatedly to select "SIRIUS".
You can also use INPUT SELECTOR +/– on the receiver.

2 Press TUNING + or TUNING – to select channel 0.

3 Check the SIRIUS ID on the display and write it in the space provided here.
SIRIUS ID:_____

Selecting channels from a category (CATEGORY TUNING)

1 Press TUNER repeatedly to select "SIRIUS".
You can also use INPUT SELECTOR +/– on the receiver.

2 Press CATEGORY MODE repeatedly to select "ONE CAT".
• ALL CAT: You can select a channel from all the categories. The initial setting is "ALL CAT".
• ONE CAT: You can select a channel from one category. "CAT" lights up on the display when you set to "ONE CAT" mode.

3 Press CATEGORY + or CATEGORY – to select the category you want.
The category is selected and the channel with the lowest number in the specified category is selected.

4 Press TUNING + or TUNING – to select the channel.

Selecting a channel number directly (Direct Tuning)

1 After selecting satellite tuner, press D.TUNING.

2 Press SHIFT, then press numeric buttons to enter the channel number.

3 Press ⊕.

Presetting satellite radio channels

(USA model only)

1 Select a channel you want to preset.

For details on this operation, see "Selecting channels from a category (CATEGORY TUNING)" (page 129).

2 Press SHIFT, then press MEMORY.

"MEM" lights up on the display.

3 Press PRESET + or PRESET – to select a preset number.

You can also select the number by pressing SHIFT, then numeric buttons. Preset numbers from 1 to 30 are available. Channel 1 is initial setting for the preset numbers when you purchase the receiver.

4 Press ENTER.

If SHIFT indicator is light off before you press ENTER, press SHIFT.
"MEM" lights off.

5 Repeat steps 1 to 4 to preset another channel.

Selecting a preset channel

1 Press TUNER repeatedly to select "SIRIUS".

2 Press PRESET + or PRESET – repeatedly to select the preset channel you want.
You can also press SHIFT, then numeric buttons to select the preset channel you want. Then, press ⊕ to enter the selection.

Using the Remote

Programming the remote

You can customize the remote to match the components connected to your receiver. You can even program the remote to control non-Sony components and also Sony components that the remote is normally unable to control. Before you begin, note that:
– You cannot change the settings of TUNER and DMPORT input buttons.
– The remote can control only components that accept infrared wireless control signals.

Be sure to turn on the receiver and point the remote towards the receiver when performing the following procedure.
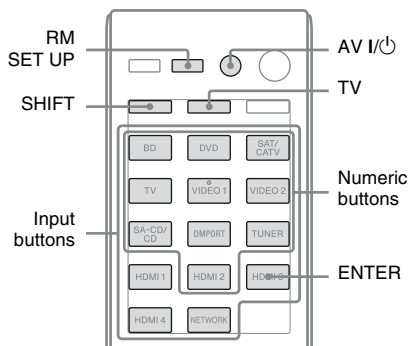
1 Press and hold RM SET UP, then press AV I/⏻.

The RM SET UP indicator flashes slowly.

2 Press the input button for the component you want to control.

For example, if you are going to control a VCR connected to VIDEO 1 jacks, press VIDEO 1.
The RM SET UP and SHIFT indicator light up.

3 Press numeric buttons to enter the numeric code (or one of the codes if more than one code exists) corresponding to the component and the maker of the component you want to control (including TV button).

See the tables on page 132–134 for information on the numeric code(s).

Note
For a TV remote code value, only numbers in the 500's are valid.

4 Press ENTER.

Once the numeric code has been verified, the RM SET UP indicator slowly flashes twice and the remote automatically exits the programming mode.

5 Repeat steps 1 to 4 to control other components.

Notes
• The indicator turns off while a valid button is pressed.
• For the numeric codes, only the last three numbers entered are valid.

To cancel programming

Press RM SET UP during any step. The remote automatically exits the programming mode.

To activate the input after programming

Press the programmed button to activate the input you want.

If programming is unsuccessful, check the following:

• If the indicator does not light up in step 1, the batteries are weak. Replace both batteries.
• If the indicator flashes 5 times in quick succession while entering the numeric code, an error has occurred.
Start again from step 1.

The numeric codes corresponding to the component and the maker of the component

Use the numeric codes in the tables below to control non-Sony components and also Sony components that the remote is normally unable to control. Since the remote signal that a component accepts differs depending on the model and year of the component, more than one numeric code may be assigned to a component. If you fail to program your remote using one of the codes, try using other codes.

Notes
• The numeric codes are based on the latest information available for each brand. There is a chance, however, that your component will not respond to some or all of the codes.
• All of the input buttons on this remote may not be available when used with your particular component.

To control a CD player

Maker	Code(s)
SONY	101, 102, 103
DENON	104, 123
JVC	105, 106, 107
KENWOOD	108, 109, 110
MAGNAVOX	111, 116
MARANTZ	116
ONKYO	112, 113, 114
PANASONIC	115
PHILIPS	116
PIONEER	117
TECHNICS	115, 118, 119
YAMAHA	120, 121, 122

To control a DAT deck

Maker	Code(s)
SONY	203
PIONEER	219

To control a tape deck

Maker	Code(s)
SONY	201, 202
DENON	204, 205
KENWOOD	206, 207, 208, 209
NAKAMICHI	210
PANASONIC	216
PHILIPS	211, 212
PIONEER	213, 214
TECHNICS	215, 216
YAMAHA	217, 218

To control an MD deck

Maker	Code(s)
SONY	301
DENON	302
JVC	303
KENWOOD	304

To control an HDD recorder

Maker	Code(s)
SONY	307, 308, 309

To control a Blu-ray Disc player/recorder

Maker	Code(s)
SONY	310, 311, 312
PANASONIC	335
SAMSUNG	336
LG	337

To control a PSX

Maker	Code(s)
SONY	313, 314, 315

To control a DVD player

Maker	Code(s)
SONY	401, 402, 403
BROKSONIC	424
DENON	405
HITACHI	416
JVC	415, 423
MITSUBISHI	419
ORITRON	417
PANASONIC	406, 408, 425
PHILIPS	407
PIONEER	409, 410
RCA	414
SAMSUNG	416, 422
TOSHIBA	404, 421
ZENITH	418, 420

To control a DVD recorder

Maker	Code(s)
SONY	401, 402, 403

To control a DVD/VCR COMBO

Maker	Code(s)
SONY	411

To control a DVD/HDD COMBO

Maker	Code(s)
SONY	401, 402, 403

To control a TV

Maker	Code(s)
SONY	501, 502
AIWA	501, 536, 539
AKAI	503
AOC	503
CENTURION	566
CORONADO	517
CURTIS-MATHES	503, 551, 566, 567
DAYTRON	517, 566
DAEWOO	504, 505, 506, 507, 515, 544
FISHER	508, 545
FUNAI	548
FUJITSU	528
GOLDSTAR/LG	503, 512, 515, 517, 534, 544, 556, 568
GRUNDIG	511, 533, 534
HITACHI	503, 513, 514, 515, 517, 519, 544, 557, 571
ITT/NOKIA	521, 522
J.C.PENNY	503, 510, 566
JVC	516, 552
KMC	517
MAGNAVOX	503, 515, 517, 518, 544, 566
MARANTZ	527
MITSUBISHI/MGA	503, 519, 527, 544, 566, 568
NEC	503, 517, 520, 540, 544, 554, 566
NORDMENDE	530, 558
NOKIA	521, 522, 573, 575
PANASONIC	509, 524, 553, 559, 572
PHILIPS	515, 518, 557, 570, 571
PHILCO	503, 504, 514, 517, 518

Maker	Code(s)
PIONEER	509, 525, 526, 540, 551, 555
PORTLAND	503
QUASAR	509, 535
RADIO SHACK	503, 510, 527, 565, 567
RCA/PROSCAN	503, 510, 523, 529, 544
SAMSUNG	503, 515, 517, 531, 532, 534, 544, 556, 557, 562, 563, 566, 569
SAMPO	566
SABA	530, 537, 547, 549, 558
SANYO	508, 545, 546, 560, 567
SCOTT	503, 566
SEARS	503, 508, 510, 517, 518, 551
SHARP	517, 535, 550, 561, 565
SYLVANIA	503, 518, 566
THOMSON	530, 537, 547, 549
TOSHIBA	535, 539, 540, 541, 551
TELEFUNKEN	530, 537, 538, 547, 549, 558
TEKNIKA	517, 518, 567
WARDS	503, 517, 566
YORK	566
ZENITH	542, 543, 567
GE	503, 509, 510, 544
LOEWE	515, 534, 556

To control an LD player

Maker	Code(s)
SONY	601, 602, 603
PIONEER	606

To control a Video CD player

Maker	Code(s)
SONY	605

Using the
Remote

To control a VCR

Maker	Code(s)
SONY	701, 702, 703, 704, 705, 706
AIWA*	710, 750, 757, 758
AKAI	707, 708, 709, 759
BLAUPUNKT	740
EMERSON	711, 712, 713, 714, 715, 716, 750
FISHER	717, 718, 719, 720
GENERAL ELECTRIC (GE)	721, 722, 730
GOLDSTAR/LG	723, 753
HITACHI	722, 725, 729, 741
ITT/NOKIA	717
JVC	726, 727, 728, 736
MAGNAVOX	730, 731, 738
MITSUBISHI/MGA	732, 733, 734, 735
NEC	736
PANASONIC	729, 730, 737, 738, 739, 740
PHILIPS	729, 730, 731
PIONEER	729
RCA/PROSCAN	722, 729, 730, 731, 741, 747
SAMSUNG	742, 743, 744, 745
SANYO	717, 720, 746
SHARP	748, 749
TOSHIBA	747, 756
ZENITH	754

* If an AIWA VCR does not work even though you enter the code for AIWA, enter the code for Sony instead.

To control a satellite tuner (box)

Maker	Code(s)
SONY	801, 802, 803, 804, 824, 825, 865
AMSTRAD	845, 846
BskyB	862
GENERAL ELECTRIC (GE)	866
GRUNDIG	859, 860
HUMAX	846, 847
THOMSON	857, 861, 864, 876
PACE	848, 849, 850, 852, 862, 863, 864
PANASONIC	818, 855
PHILIPS	856, 857, 858, 859, 860, 864, 874
NOKIA	851, 853, 854, 864
RCA/PROSCAN	866, 871
BITA/HITACHI	868
HUGHES	867
JVC/Echostar/Dish Network	873
MITSUBISHI	872
SAMSUNG	875
TOSHIBA	869, 870

To control a cable box

Maker	Code(s)
SONY	821, 822, 823
HAMLIN/REGAL	836, 837, 838, 839, 840
JERROLD/G.I./MOTOROLA	806, 807, 808, 809, 810, 811, 812, 813, 814, 819
JERROLD	830, 831
OAK	841, 842, 843
PANASONIC	816, 826, 832, 833, 834, 835
PHILIPS	830, 831
PIONEER	828, 829
RCA	805
SCIENTIFIC ATLANTA	815, 816, 817, 844
TOCOM/PHILIPS	830, 831
ZENITH	826, 827

Clearing all the contents of the remote's memory

1 **While holding down MASTER VOL – (RM-AAP055 only) or ⊿ – (RM-AAP056 only), press and hold I/○, then press AV I/○.**

The RM SET UP indicator flashes 3 times.

2 **Release all buttons.**

All the contents of the remote's memory (i.e., all the programmed data) are cleared.

Precautions

On safety

Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On power sources

- Before operating the receiver, check that the operating voltage is identical with your local power supply.
  The operating voltage is indicated on the nameplate on the back of the receiver.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- If you are not going to use the receiver for a long time, be sure to disconnect the receiver from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.
- (USA model only)
  One blade of the plug is wider than the other for the purpose of safety and will fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- The AC power cord (mains lead) must be changed only at a qualified service shop.

On heat buildup

Although the receiver heats up during operation, this is not a malfunction. If you continuously use this receiver at a large volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat buildup and prolong the life of the receiver.
- Do not place the receiver near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place anything on top of the cabinet that might block the ventilation holes and cause malfunctions.
- Do not place the receiver near equipment such as a TV, VCR, or tape deck. (If the receiver is being used in combination with a TV, VCR, or tape deck, and is placed too close to that equipment, noise may result, and picture quality may suffer. This is especially likely when using an indoor antenna (aerial). Therefore, we recommend using an outdoor antenna (aerial).)
- Use caution when placing the receiver on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On operation

Before connecting other components, be sure to turn off and unplug the receiver.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

On S-AIR function

- As the S-AIR product(s) transmits sound by radio waves, sound may skip when radio waves are obstructed. This is a characteristic of radio waves and is not malfunction.
- As the S-AIR product(s) transmits sound by radio waves, equipment that generates electromagnetic energy, such as a microwave oven, may prevent sound transmission.
- As the S-AIR function uses the radio waves that share the same frequency as other wireless systems, such as wireless LAN or Bluetooth devices, interference or poor transmission may result. In this case, take the following steps:
  – Avoid placing the S-AIR product(s) near other wireless systems.
  – Avoid using the S-AIR product(s) and the other wireless systems spontaneously.
  – The transmission may be improved by changing the transmission channel (frequency) of the other wireless system(s). For details, refer to the operating instructions of the other wireless system(s).
- The transmission distance differs depending on the usage environment. Find a location where transmission between the S-AIR main unit and sub unit is most effective, and install the S-AIR main unit and sub unit there.
- Place the S-AIR product(s) on the stable surface off the floor.
- Poor transmission may occur and the transmission distance may be too short if the following conditions exist:
  – There is a wall/floor made of reinforced concrete or stone between the S-AIR product(s).
  – There is an iron divider/door or furniture/electric product made of fireproof glass, metal, etc., between the S-AIR product(s).

If you have any questions or problems concerning your receiver, please consult your nearest Sony dealer.

Troubleshooting

If you experience any of the following difficulties while using the receiver, use this troubleshooting guide to help you remedy the problem. Should any problem persist, consult your nearest Sony dealer.

General

The receiver is turned off automatically.
- "Auto Standby" is set to "ON" (page 121).
- The Sleep Timer function is working (page 59).

Audio

There is no sound, no matter which component is selected, or only a very low-level sound is heard.
- Check that the speakers and components are connected securely.
- Check that all speaker cords are connected correctly.
- Check that both the receiver and all components are turned on.
- Check that MASTER VOLUME control is not set to "VOL MIN".
- Check that the SPEAKERS is not set to "SPK OFF" (page 42).
- Check that headphones are not connected to the receiver or S-AIR surround amplifier.
- Press MUTING (RM-AAP055 only) or ⦸ (RM-AAP056 only) on the remote to cancel the muting function.
- Check that you have selected the correct component with the input buttons (page 54).
- Check to see if NIGHT MODE is activated (page 77).

- The protective device on the receiver has been activated. Turn off the receiver, eliminate the short-circuit problem, and turn on the power again.

There is no sound from a specific component.
- Check that the component is connected correctly to the audio input jacks for that component.
- Check that the cord(s) used for the connection is (are) fully inserted into the jacks on both the receiver and the component.
- Set the INPUT MODE to "AUTO" (page 103).

There is no sound from one of the front speakers.
- Connect a pair of headphones to the PHONES jack to verify that sound is output from the headphones. If only one channel is output from the headphones, the component may not be connected to the receiver correctly. Check that all the cords are fully inserted into the jacks on both the receiver and the component. If both channels are output from the headphones, the front speaker may not be connected to the receiver correctly. Check the connection of the front speaker which is not outputting any sound.
- Make sure you have connected to both the L and R jacks of an analog component, and not only to either the L or R jack. Use an audio cord (not supplied). However, there will be no sound from the center speaker when a sound field (2ch Stereo, etc.) is selected. When the center speaker is not connected, sound is output only from the front left/right speakers.

There is no sound from analog 2 channel sources.
- Check that the selected digital audio input jack is not assigned to other inputs in "Input Assign" in the Input Option menu (page 104).

Additional Information

There is no sound from digital sources (from COAXIAL or OPTICAL input jack).

- Check that the INPUT MODE is not set to "ANALOG" (page 103).
- Check that the "A. DIRECT" is not being used.
- Check that the selected digital audio input jack is not assigned to other inputs in "Input Assign" in the Input Option menu (page 104).

The left and right sounds are unbalanced or reversed.

- Check that the speakers and components are connected correctly and securely.
- Adjust the level parameters using the Speaker Settings menu.

There is severe hum or noise.

- Check that the speakers and components are connected securely.
- Check that the connecting cords are away from a transformer or motor, and at least 10 feet (3 meters) away from a TV set or fluorescent light.
- Move your audio components away from the TV.
- The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.

There is no sound, or only a very low-level sound is heard from the center/surround/surround back/front high speakers.

- Select a Cinema Studio EX mode (page 73, 74).
- Adjust the speaker level (page 110).
- Make sure the center/surround speaker (s) is (are) set to either "Small" or "Large".
- Check that the speaker settings are appropriate using the Auto Calibration menu or "Speaker Pattern" in the Speaker Settings menu. Then check that sound is output from each speaker correctly, using "Test Tone" in the Speaker Settings menu.

There is no sound from the surround back speakers.

- Some discs have no Dolby Digital Surround EX flag even though the packages have Dolby Digital Surround EX logos.
- Check the "Speaker Pattern" setting (page 40).

There is no sound from the subwoofer.

- Check that the subwoofer is connected correctly and securely.
- Make sure you have turned on your subwoofer.
- Depending on the selected sound field, no sound output from the subwoofer.
- When all speakers are set to "Large" and "Neo:6 CIN" or "Neo:6 MUS" is selected, there is no sound from the subwoofer.
- Check the "Speaker Pattern" setting (page 40).

The surround effect cannot be obtained.

- Make sure you have selected the sound field for movie or music (page 73 or 74).
- Sound fields do not function for signals with a sampling frequency of more than 48 kHz.

Dolby Digital or DTS multi channel sound is not reproduced.

- Check that the DVD, etc. you are playing is recorded in Dolby Digital or DTS format.
- When connecting the DVD player, etc., to the digital input jacks of this receiver, make sure the setting for the digital audio output of the connected component is available. For example, when connecting the "PlayStation 3", set the BD/DVD audio output format to "Bitstream" on the "PlayStation 3".
- Set "Audio Out" to "AMP" in the HDMI Settings menu.

Recording cannot be carried out.

- Check that the components are connected correctly.
- Select the source component using the input buttons (page 54).

The MULTI CHANNEL DECODING indicator does not light up in blue.

- Check that the playback component is connected to a digital jack and the input is selected properly on this receiver.
- Check whether the input source of the software being played back corresponds to the multi channel format.
- Check whether the setup on the playback component is set to multi channel sound.
- Check to make sure the selected digital audio input jack is not assigned to other inputs in "Input Assign" in the Input Option menu (page 104).

There is no sound from the component connected to the DIGITAL MEDIA PORT adapter.

- Adjust the volume of this receiver.
- The DIGITAL MEDIA PORT adapter and/or component is not connected correctly. Turn off the receiver, then reconnect the DIGITAL MEDIA PORT adapter and/or component.
- Check the DIGITAL MEDIA PORT adapter and/or component device to make sure it supports this receiver.

Video

There is no picture or an unclear picture appears on the TV screen or monitor.

- Select the appropriate input using the input buttons.
- Set your TV to the appropriate input mode.
- Move your audio components away from the TV.
- Assign the component video input correctly.

- The input signal should be same as the input function when you are up-converting an input signal with this receiver (page 33).
- Depending on the DIGITAL MEDIA PORT adapter, video output may not be possible.
- When you use an HDMI-DVI conversion cable for the connection, the image may not be output correctly.

The image of the COMPONENT VIDEO MONITOR OUT is corrupted.

- The resolution of output signals from the COMPONENT VIDEO MONITOR OUT jacks may not be supported by your TV. In this case, select the appropriate resolution on the receiver (page 116).

Recording cannot be carried out.

- Check that the components are connected correctly.
- Select the source component using the input buttons (page 54).

The GUI menu does not appear on the TV screen.

- Press GUI MODE repeatedly to select "GUI ON". If the GUI menu still does not appear on the TV screen, press MENU.
- Check that the TV is connected correctly.

HDMI

The source sound input from the HDMI IN jack on the receiver is not output from the speakers connected to the receiver or TV speaker.

- Check the setting of "Audio Out" in the HDMI Settings menu (page 117).
- Check that the component is connected correctly to the HDMI jack for that component.
- You cannot listen to the Super Audio CD by connecting HDMI.

- Depending on the playback component, you may need to set up the component. Refer to the operating instructions supplied with each component.
- Be sure to use a High Speed HDMI cable when you view images or listen to sound during a 1080p, Deep Color (Deep Colour) or 3D transmission.
- Sound may not be output from the receiver while the GUI appears on the TV screen. Press GUI MODE to select "GUI OFF".

Images from the component connected to the HDMI jack are not output to the TV, are distorted, or are interrupted.

- Make sure that cables are correctly and securely connected to components.
- Depending on the playback component, you may need to set up the component. Refer to the operating instructions supplied with each component.
- Be sure to use a High Speed HDMI cable when you view images or listen to sound during a 1080p, Deep Color (Deep Colour) or 3D transmission.

No 3D image appears on the TV.

- Depending on the TV or the video component, 3D images may not be displayed. Check the 3D image formats supported by the system (page 146).

The Control for HDMI function does not work.

- Check the HDMI connection (page 25).
- Make sure "Control for HDMI" is set to "ON" in HDMI Settings menu.
- Make sure the connected component is compatible with the Control for HDMI function.
- Check the Control for HDMI settings on the connected component. Refer to the operating instructions of the connected component.
- When "Control for HDMI" is set to "OFF", the "BRAVIA" Sync does not work properly, even if a component is connected to the HDMI IN jack.

- The types and the number of components which can be controlled by the "BRAVIA" Sync are restricted in the HDMI CEC standard as follows.
  – Recording component (Blu-ray Disc recorder, DVD recorder, etc.): up to 3 components
  – Playback component (Blu-ray Disc player, DVD player, etc.): up to 3 components
  – Tuner-related component: up to 4 components
  – AV receiver (audio system): up to 1 component

No sound is output from the receiver and TV speaker while using the System Audio Control function.

- Make sure the TV is compatible with the System Audio Control function.
- If the TV does not have System Audio Control function, set the "Audio Out" settings in HDMI Settings menu to
  – "TV+AMP" if you want to listen to the sound from the TV speaker and receiver.
  – "AMP" if you want to listen to the sound from the receiver.
- When you connect the receiver to a video component (projector, etc.), sound may not be output from the receiver. In this case, select "AMP".
- If you cannot listen to the sound of a component connected to the receiver while TV input is selected on the receiver
  – Change the input of the receiver to HDMI when you want to watch a program on a component connected via HDMI connection to the receiver.
  – Change the TV channel when you want to watch a TV broadcast.
  – Select the component or input you want to watch when you watch a program on the component connected to the TV. Refer to the operating instructions of the TV on this operation.

The TV's remote cannot be used to control the connected component when using the Control for HDMI function.

- Depending on the connected component and TV, you may need to set up the component and TV. Refer to the operating instructions supplied with each component and TV.
- Change the input of the receiver to the HDMI input connected to the component.

When the receiver is in standby mode, there is no image or sound output from the TV.

- When the receiver is in standby mode, image and sound are output from the HDMI component selected the last time you turned off the receiver. If you are enjoying other component, play the component and perform the One-Touch Play operation, or turn on the receiver to select the HDMI component you want to enjoy.
- Make sure "Pass Through" is set to "ON" in the HDMI Settings menu if you connect components not compatible with the "BRAVIA" Sync to the receiver (page 117).

S-AIR function

S-AIR connection is not established (sound transmission is not established), e.g., the indicator of the S-AIR sub unit turns off, flashes, or turns red.

- If you use another S-AIR main unit, place it more than 26 feet (8 meters) away from this S-AIR main unit.
- Confirm the S-AIR IDs of the S-AIR main unit and S-AIR sub unit are the same (page 95).
- Another S-AIR sub unit is paired to the S-AIR main unit. Pair the S-AIR sub unit you want with the S-AIR main unit (page 96).

- Place the S-AIR main unit and S-AIR sub unit separately from other wireless devices.
- Avoid using any other wireless devices.
- The S-AIR sub unit is turned off. Make sure the AC power cord (mains lead) is connected and turn on the S-AIR sub unit.

No sound is heard from the S-AIR receiver.

- Check that the components are connected to the receiver.

No sound is heard from the S-AIR product.

- If you use another S-AIR main unit, place it more than 26 feet (8 meters) away from this S-AIR main unit.
- Confirm the ID of the S-AIR main unit and S-AIR sub unit are the same (page 95).
- Confirm the pairing setting (page 96).
- Place the S-AIR main unit and S-AIR sub unit closer to each other.
- Avoid using the equipment that generates electromagnetic energy, such as a microwave oven.
- Place the S-AIR main unit and S-AIR sub unit separately from other wireless devices.
- Avoid using any other wireless devices.
- Change the "RF Change" setting (page 100).
- Change the ID settings of the S-AIR main unit and S-AIR sub unit.
- Turn off the system and S-AIR sub unit, then turn them on again.
- Check that headphones are not connected to the S-AIR sub unit.

There is noise or the sound skips.

- If you use another S-AIR main unit, place it more than 26 feet (8 meters) away from this S-AIR main unit.
- Sources with copyright protection may not be playable on S-AIR sub unit.
- Place the S-AIR main unit and S-AIR sub unit closer to each other.

- Avoid using the equipment that generates electromagnetic energy, such as a microwave oven.
- Place the S-AIR main unit and S-AIR sub unit separately from other wireless devices.
- Avoid using any other wireless devices.
- Change the "RF Change" setting (page 100).
- Change the ID settings of the S-AIR main unit and S-AIR sub unit.

"HP NO LINK" and "VOL MIN" appear alternately on the display and the volume of the receiver becomes minimum.

- Volume becomes minimum when you turn off the surround amplifier with headphones connected or if the radio reception is poor. In these cases, check the radio reception and adjust the volume level to restore sound from the headphones.

Tuner

The FM reception is poor.

- Use a 75-ohm coaxial cable (not supplied) to connect the receiver to an outdoor FM antennas (aerial) as shown below. If you connect the receiver to an outdoor antenna (aerial), ground it against lightning. To prevent a gas explosion, do not connect the ground (earth) wire to a gas pipe.

Outdoor FM antenna (aerial)

Receiver

Ground (earth) wire (not supplied)

To ground
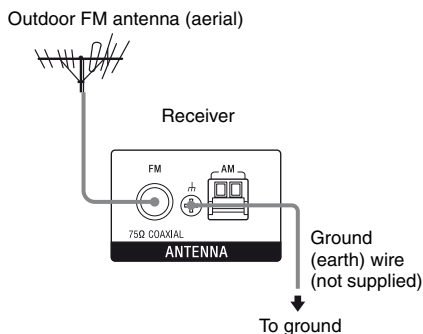
Radio stations cannot be tuned in.

- Check that the antennas (aerials) are connected securely. Adjust the antennas (aerials) and connect an external antenna (aerial), if necessary.
- Keep the satellite radio antenna, away from the speaker cords and the power cord to avoid picking up noise.*
- The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
- Make sure you set the tuning interval correctly (when tuning in AM stations with direct tuning).
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 63).
- Press AMP, then press DISPLAY repeatedly on the remote so that the frequency appears on the display.

The receiver cannot receive satellite channels at all.*

- The receiving condition is not good. Move the antenna to the place where the condition is good.
- Check that you subscribed to the satellite radio service you want (page 65).

RDS does not work.**

- Make sure that you are tuned to an FM RDS station.
- Select a stronger FM station.

The RDS information that you want does not appear.**

- Contact the radio station and find out whether they actually provide the service in question. If so, the service may be temporarily out of order.

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* USA model only.
**European model only.

Remote commander

The remote does not function.

- Point the remote at the remote sensor on the receiver.
- Remove any obstacles in the path between the remote and the receiver.
- Replace all the batteries in the remote with new ones, if they are weak.
- Make sure you select the correct input on the remote.
- When you operate a programmed non-Sony component, the remote may not function properly depending on the model and the maker of the component.

Network

Cannot find the server.

- Search the server using the "ServerSearch" function (page 79).
- Check the following:
  – Is the router turned on?
  – If there is another device between this device and the router, check that device is turned on.
  – Are all of the cables connected correctly and securely?
  – Is the settings to make sure that they match the router's settings (DHCP or fixed IP address)?
- When using a computer, check the following:
  – The built-in firewall settings for the computer's operating system.
  – The firewall settings of your security software. To check the firewall settings of your security software, refer to your security software's Help section.
- Register this device with the server. For details, refer to the operating instructions supplied with the server.
- Wait for a few moments, and then try connecting to the server again.

Cannot find or play back the content on the server.

- On the " ♫ Music", " 📷 Photo", and " 🎞 Video" screens, the receiver displays only the content that can be played back with the receiver from among the content offered by the server within the DLNA guidelines.
- The content without a [*] mark before the name is offered by the server as that defined in the DLNA guidelines, and it can be played back with the receiver.
  The content with a [*] mark before the name is offered by the server as that not defined in the DLNA guidelines, and it may be played back with the receiver.
- There may be content that is not displayed even if it can be played back with the receiver because it is not defined in the DLNA guidelines. However, the receiver may not be able to play back the content, even if it is defined in the DLNA guidelines.
- The availability of certain content may differ, depending on the server software. If the content is not displayed or cannot be played back, try the supplied VAIO Media plus application software as your server software.

Cannot connect to the receiver with the Setup Manager application software.

- Does antivirus software, firewall software, or a network packet filter driver run on your computer?
  Deactivate such software temporarily, or change the settings to accept all incoming TCP or UDP packets from the receiver.

Cannot access the receiver from the network controller.

- Make sure "External Control" is set to "ON" in Network Settings menu.

- Is the network controller listed on the Controllers settings screen, and is the box for "Permit" checked?
  If the box is not checked, check the box for "Auto Permission", and return to the menu. Then, operate the receiver using the network controller once, and then uncheck the box for "Auto Permission".
- If the network controller is a computer software controller, is the software filtered by antivirus software or firewall software? Permit UPnP communications between the software and the receiver.
- Network controllers could be listed up to 10 on the "Controllers". If the network controller does not listed, remove some of controller(s) and try again.

If the trouble is other than one of the cases described above and the trouble is not solved even if you wait for a while, perform either of the operations below.
- Press I/⏻ on the remote to turn the receiver off and then on again.
- Hold down I/⏻ on the receiver until the white indicator flashes to reboot the receiver.

Error messages

If there is a malfunction, the display shows a message. You can check the condition of the system by the message. See the following table to solve the problem. If any problem persists, consult your nearest Sony dealer.

PROTECTOR

Irregular current is output to the speakers, or upper panel of the receiver is covered with something. The receiver will automatically turn off after a few seconds. Check the speaker connection and turn on the power again.

For other messages, see "Message list after Auto Calibration measurement" (page 48), "DIGITAL MEDIA PORT message list" (page 58) and "Satellite radio message list" (page 72).

If the problem persist

Consult your nearest Sony dealer. Note that if service personnel changes some parts during repair, these parts may be retained.
In the event of a problem with S-AIR function, have a Sony dealer check the entire system together (S-AIR main unit and S-AIR sub unit).

Reference sections for clearing the receiver's memory

To clear	See
All memorized settings	page 39
Customized sound fields	page 77

About support information

Refer to the following web site for details of the latest information on the receiver.

For customers in the United States:
http://www.sony.com/essupport

For customers in Europe:
http://support.sony-europe.com/quickjump/STR

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (USA model only)

With 8 ohm loads, both channels driven, from 20 Hz – 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

USA model[1]

Minimum RMS Output Power
(8 ohms, 20 Hz – 20 kHz, THD 0.09%)
100 W + 100 W
Stereo Mode Output Power
(8 ohms, 1 kHz, THD 1%)
110 W + 110 W
Surround Mode Output Power[2]
(8 ohms, 1 kHz, THD 10%)
150 W per channel

European model[1]
Stereo Mode Output Power
(8 ohms, 1 kHz, THD 1%)
100 W + 100 W
Surround Mode Output Power[2]
(8 ohms, 1 kHz, THD 10%)
140 W per channel

[1]Measured under the following conditions:

Area	Power requirements
USA	120 V AC, 60 Hz
Europe	230 V AC, 50 Hz

[2]Reference power output for front, center, surround, surround back and front high speakers. Depending on the sound field settings and the source, there may be no sound output.

Frequency response
Analog   10 Hz – 70 kHz, +0.5 dB/–2 dB (with sound field and equalizer bypassed)
Input
Analog   Sensitivity: 500 mV/ 50 kohms
S/N[3]: 96 dB (A, 500 mV[4])
Digital (Coaxial) Impedance: 75 ohms
S/N: 100 dB (A, 20 kHz LPF)
Digital (Optical) S/N: 100 dB (A, 20 kHz LPF)
Output (Analog)
AUDIO OUT   Voltage: 500 mV/10 kohms
SUBWOOFER   Voltage: 2 V/1 kohm
Equalizer
Gain levels   ±10 dB, 0.5 dB step

[3]INPUT SHORT (with sound field and equalizer bypassed).
[4]Weighted network, input level.

FM tuner section

Tuning range   87.5 MHz – 108.0 MHz
Antenna (aerial)   FM wire antenna (aerial)
Antenna (aerial) terminals
75 ohms, unbalanced
Intermediate frequency
10.7 MHz

AM tuner section

Tuning range

Area	Tuning scale	
	10 kHz step	9 kHz step
USA	530 kHz – 1,710 kHz	531 kHz – 1,710 kHz
Europe	–	531 kHz – 1,602 kHz

Antenna (aerial)   Loop antenna (aerial)
Intermediate frequency
450 kHz

Additional Information

Video section

Inputs/Outputs

Video: 1 Vp-p, 75 ohms

COMPONENT VIDEO:

Y: 1 Vp-p, 75 ohms

P$_B$/C$_B$: 0.7 Vp-p, 75 ohms

P$_R$/C$_R$: 0.7 Vp-p, 75 ohms

80 MHz HD Pass Through

HDMI Video

Input/Output (HDMI Repeater block)

640 × 480p@60 Hz

720 × 480p@59.94/60 Hz

1280 × 720p@59.94/60 Hz

1920 × 1080i@59.94/60 Hz

1920 × 1080p@59.94/60 Hz

720 × 576p@50 Hz

1280 × 720p@50 Hz

1920 × 1080i@50 Hz

1920 × 1080p@50 Hz

1920 × 1080p@24 Hz

HDMI Video (3D)

Input/Output (HDMI Repeater block)

1280 × 720p@59.94/60 Hz Frame packing

1280 × 720p@59.94/60 Hz Top-and-Bottom

1920 × 1080i@59.94/60 Hz Frame packing

1920 × 1080i@59.94/60 Hz Side-by-Side (Half)

1920 × 1080p@59.94/60 Hz Side-by-Side (Half)

1280 × 720p@50 Hz Frame packing

1280 × 720p@50 Hz Top-and-Bottom

1920 × 1080i@50 Hz Frame packing

1920 × 1080i@50 Hz Side-by-Side (Half)

1920 × 1080p@50 Hz Side-by-Side (Half)

1920 × 1080p@24 Hz Frame packing

1920 × 1080p@24 Hz Top-and-Bottom

Supported playback formats

Content delivered from the device on the home network needs to support the following formats for you to play back content on this receiver.

Type of content	Format	Other conditions
Music	Linear PCM	LPCM defined in DLNA guidelines 1.0 Sampling Rate: 44.1 kHz, 48 kHz Channels: 1, 2 Quantization: 16 bit
	MPEG-1 Layer 3 (MP3)	MPEG defined in DLNA guidelines 1.0 Bitrate: 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 kbps Sampling Rate: 32 kHz, 44.1 kHz, 48 kHz Channels: 1, 2 Encoding: CBR, VBR
	Windows Media Audio (WMA)	WMA_FULL and WMA_BASE defined in DLNA guidelines 1.0 Maximum Bitrate: 385 kbps Sampling Rate: up to 48 kHz Channels: 2 Not compatible with WMA Pro files.
	AAC	AAC_ISO defined in DLNA guidelines 1.0 AAC Profile @ Level 1, @ Level 2 Sampling Rate: 8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48 kHz Maximum Bitrate: 576 kbps Channels: 1, 2 Some files may not be played back.
	WAV	Conforms to Linear PCM. Some files may not be played back.

Type of content	Format	Other conditions
Photo	JPEG	JPEG_SM, JPEG_MED, or JPEG_LRG defined in DLNA guidelines 1.0 Maximum Resolution: 4096 × 4096 Non-progressive JPEG
	BMP	Conforms to JPEG. Some files may not be played back.
	PNG	Conforms to JPEG. Some files may not be played back.
Video	MPEG-2 (NTSC)	MPEG_PS_NTSC defined in DLNA guidelines 1.0 Maximum Resolution: 720 × 480 Maximum System Bitrate: 10.08 Mbps Maximum Bitrate* CBR: 9.80 Mbps/VBR: 9.80 Mbps * Bitrate is mixed with MPEG-1 Layer 1/2/3, PCM, or AC3 audio format.
	MPEG-2 (PAL)	MPEG_PS_PAL defined in DLNA guidelines 1.0 Maximum Resolution: 720 × 576 Maximum System Bitrate: 10.08 Mbps Maximum Bitrate* CBR: 9.80 Mbps/VBR: 9.80 Mbps * Bitrate is mixed with MPEG-1 Layer 1/2/3, PCM, or AC3 audio format.
	Windows Media Video (WMV)	Maximum Resolution: 720 × 480 Maximum Bitrate: 2 Mbps Windows Media Video 7/8/9 standard definition for Main profile mixed with Windows Media Video 7/8/9 excludes all profile of Windows Media Audio professional. Some files may not be played back.

Notes

- Not compatible with DRM protected files.
- Depending on the files, there may be files that sometimes cannot be played back, even if they meet the requirements described above.
- Concerning the formats defined in the DLNA guidelines, the server is required to offer the content to which the format information defined in the DLNA guidelines has been added properly.

General

Power requirements

Area	Power requirements
USA	120 V AC, 60 Hz
Europe	230 V AC, 50/60 Hz

Power output (DIGITAL MEDIA PORT)
DC OUT: 5V, 0.7A MAX

Power consumption   250 W

Power consumption (during standby mode)
0.5 W (When "Control for HDMI", "Network Standby" and "S-AIR Standby" are set to "OFF")

Dimensions (width/height/depth) (Approx.)
17 in × 6 1/4 in × 12 7/8 in (430 mm × 157.5 mm × 324.5 mm) including projecting parts and controls

Mass (Approx.)   19 lb 14 oz (9.0 kg)

Design and specifications are subject to change without notice.

Halogenated flame retardants are not used in the certain printed wiring boards.

Index

Additional Information

*4 1 8 2 0 4 9 1 1 * (1)

http://www.sony.net/